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COMMODORE USER

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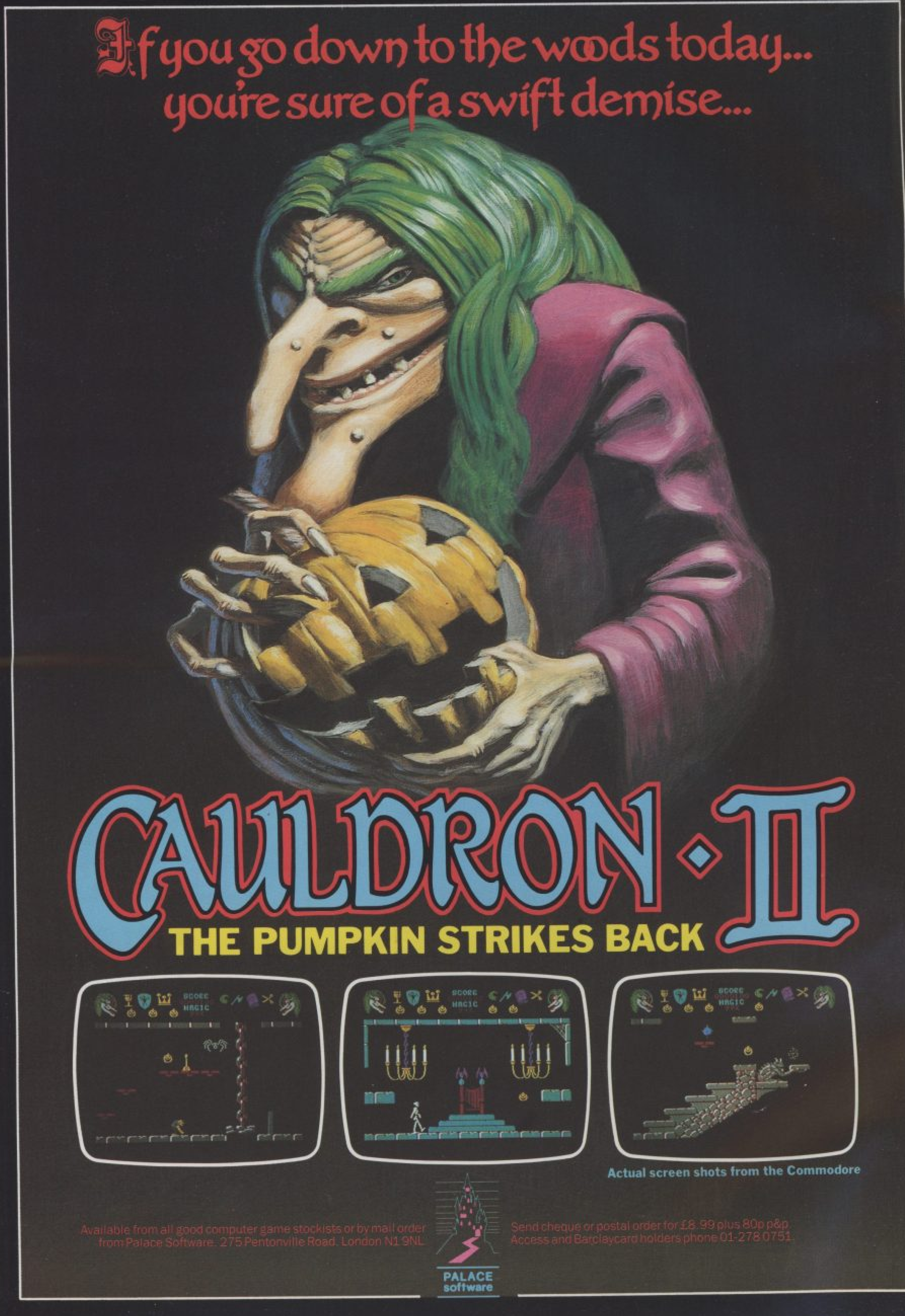
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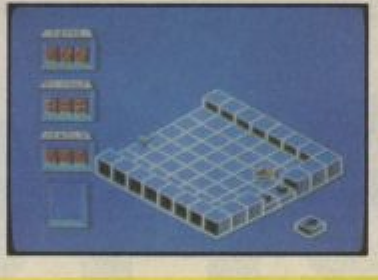
REVIEWED
Starquake
Spindizzy
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JUNE

SPECIALS

REGULARS

SCREEN SCENE



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Editorial/Advertising: 01-251 6222

Subscriptions 0732 351216
Annual Subs. (UK) £15
Europe £24
World £38

Registered Offices:
Priory Court,
30-32 Farringdon Lane
London EC1R 3AU

ISS 0265-721X

ABC
MEMBER OF THE AUDIT BUREAU OF CIRCULATIONS
48,565
July-Dec. 1985

Letters

A fan writes

Re: A made-up letter (Feb)
How can anybody say your magazine is fab without being a professional boot licker?

I don't think your magazine is very good *(get away — Ed)*. I also think it's becoming worse. I just saw an issue of it in June 1984. Soon afterwards I took out a subscription because I was quite impressed. You've managed to regress a lot since then. With the arrival of Hot Shot Mike (I will leave you to guess what I would call him) my opinion of your magazine fell. Who the merry hell wants to know what Kevin Toms was doing in another magazine.

Now, to deal with your team of reviewers who go by that sophisticated name, G-Force. Who chose that name? How old is he? An uninspired name like that would have sounded right to me when I was seven years old.

Actually, your games reviews have improved, more or less, except for Kevin McMahon ripping every programmer's efforts to shreds, except when he would end up being shouted down by a thousand satisfied owners.

The reviews I read of Activision's Music Studio and Island Logic/Firebird's The Music System were terrible. Disorganised, awkward, uninformative and inconclusive. I expected at least a table showing marks out of 10 for music editing ease, sound editing ease, features, and value.

I think that's enough complaints, so may I make a few suggestions. Fewer games reviews. Only publish reviews of the best games. Scrap G-Force, or choose a slightly less ridiculous name. Scrap Hot Shots, or stop the verbal sewage which Mike Pattenden manages to spew out. Shoot Mike Pattenden. Offer a better prize for the 'star letter' each month. Don't do any more articles about 64's in petshops and chemists. I hate them *(Sorry — Ed)*. Include a poster (large) inside the magazine *(how large? — Ed)* like in rock magazines, but of programmers of something of interest and use.
Daniel Procida
Addis Ababa, Ethiopia.

Why are you still reading the mag? There's obviously something that keeps you coming back month after month.

You imply we're childish and then in the next breath you ask for marks out of ten for everything. Sad. You want pin-ups of programmers. Strange.

As for star letters you'll notice there is one — and it's not yours.

P.S. Mike leaves you to guess what he called you.

Hype Hate

I'm writing in disgust at the software house Telarium and also the fact that I was very foolhardy in spending £19 on what was meant to be a good game.

Nine Princes in Amber took only 4 hours to complete from start to finish and then I spent about 30 minutes getting different endings to the game which was very easy and didn't make me much happier at the fact that I've wasted £19.

You can liken the game to Adrian Mole, all you need are the correct answers or ask the correct questions at the right time and hey presto.

Telarium have produced some good adventures, *451* and *Rendezvous with Rama* to name two but this offering has left me with a sour taste in my mouth. Never again will a Telarium adventure find it's name in my cheque book.
Here are some clues:
Getting killed at Evelyns by monsters then "Call Sister"
Use the "R" command whilst fighting Julian.
Don't kill Julian you can tie him up if you like.
If you have your eyes burnt out then the command "Wait" restores them soon.



DANGER – SOFTWARE SUPER HYPE AT WORK

If you accept Bleys offer to go to his camp it gives a better finish.
Benedict is very forceful and may end up ruling Amber if you don't react quick.
Kiss Evelyn, well you may as well get some pleasure out of this game.
I suggest in future you print this logo I've done next to hyped games.
DANGER
SOFTWARE HOUSE SUPER HYPE AT WORK ON THIS GAME
Malcolm Harnden,
Stamford, Lincs.

Why cheat?

What is the point in buying a game and freezing the sprite collisions etc, so you can cruise through the various screens with ease? No competition! It's cheating! If you are to say I've got past level whatever, you've got to do it without aids like Robtek's Game Killer.

May I also say what a great magazine you have. I was most impressed by G-Force's reviews, Tommy's Tips, the free type-in programs and the competitions. But why not print what each line of the program does, and what the various pokes do? Why not have more interviews? With the programmers as well as the software houses. The only programmer I've seen interviewed in a magazine, was Jeff Minter. What about the others?
Robert Olsen,
Marlow, Bucks.

Your request is noted.

Gridiron gripe

I must congratulate you on your April review of *Superbowl*, as a devoted fan of American Football (I am an L.A. Rams fanatic) I thought your review was excellent. After reading your reports I couldn't wait to get my hands on a copy of this game, unfortunately all the local stockists are painstakingly slow at stocking new programs.

The stores are Menzies who told me when I enquired "No idea when it will be in stock". Boots comment "Never heard of it!" Woolworths "Super-what?". The great and wonderful Woolies are about six to nine months behind the times as far as software is concerned.

I was thinking of ordering an extra copy of "Commodore User" to keep them up to date on what is happening in 64 land. I also asked them why they don't stock any ▶

Our letters bag is bulging with your comments, criticisms, queries and praise currently so we're expanding our letters page. Every letter printed gets a coveted Commodore User T-shirt, but we've added an extra incentive — the chance of winning a chart-topping game for the star letter of the month. So get your pen and paper out and write in to:

Letters, Commodore User, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU.

Mastertronic games, and was asked "Who the hell are they?"

On the subject of Mastertronic, why can't other software companies (U.S. Gold etc.) follow their lead and give us an honest and decent price for games, instead of vastly inflated prices for super-hyped games a lot of which turn out to be very disappointing, e.g. Elite's "Commando".

Jack Diamond,
Ayr, Scotland.

Super Bowl was late which explains why many stockists probably didn't have it.

Hot to trot

I thought readers may be interested in my guide to what's hot, and what's not in the computer software world.

Hot: Ocean, Epyx, The Eidolon, Commodore User, Uridium, Chris Harvey & Neil Bate, Activision, Martin Galway, Zoids, Fight Night, Melbourne House, Ballblazer.

Not: Jeff (yawn) Minter, Domark, The Young Ones, Beyond, Quicksilva, Electric Dreams, Zzap, CRL, Jet Set Willy I&II, Spy vs Spy II (boring), Ariolasoft, Outlaws, Law of the West and any other western with exceptions: Wild West & Kane.

James Forster,
Sittingbourne, Kent.

P.S. I loved Ken McMahon's review of Quicksilva's Death Wake in March.

T-shirt M

See, someone likes you Ken.

Pole axed

I just couldn't believe myself when I saw that you gave 'Yie Ar Kung Fu' a screen star review. How long did you play for? Did you get up to 'Pole'? Because if you did I don't think you would have given it the review it got.

This is simply because Pole is extremely hard, together with the fact that it has a bug. If you get too close to him, he traps you and drains your energy until you are knocked out. It made me want to smash the computer, I was so frustrated.

Why can't Imagine test the game before they release it? I'm sure this 'feature' wasn't meant to be there. I know they only had something like a couple of weeks or so to write it in but still!

Jamie Phillips,
Gosforth, Newcastle upon Tyne.

P.S. Did you know your offices are next to a well known Parmasan cheese makers? Is that where G-Force get their energy from?

Commodore User is next to a pub actually — that's where we get our energy from. As for Pole — that is not a bug.

Star Letter

Dear Software companies.,

Why do you ask 9 or 10 quid for software tapes which are sometimes a load of *@*@!?

Mastertronic manage to produce good quality programs like *Finders Keepers* and *Action Biker* for £1.99 and really good programs like *Master of Magic* for only £2.99, which is the sort of game you'd expect to pay £7.95 plus for. Why can't U.S. Gold etc. all do the same? The software companies are always complaining about piracy, but if they reduced their price to a fiver or less there would be less copying, more tapes sold and therefore more money for the software companies.

Also why do '64 owners usually pay a quid more than Spectrum owners? And why are disk drive owners expected to pay even more than tape users? — about the only company who doesn't do this is Commodore, whose price is usually the same for disks and tapes. Much of their stuff is good value.

The software companies are too greedy, expecting us, the people who keep them in business to fork out a well-earned tenner far too often.

I think the software companies have got a lot of answering to do. So take heed U.S. Gold and others and take a leaf out of Mastertronic's book.

Jonathan Tinker,
Huddersfield, W. Yorks.

The big guns aren't happy about Mastertronic which is why they're getting them out of the charts. Perhaps a representative from U.S. Gold would like to reply to this.

Plus/4 Paranoid

Why do you criticize the Plus/4 so badly? What is wrong with it? It has an excellent range of software (with built-in software), 64k RAM, a large range of peripherals and it is more popular than a 64!

No other magazine criticizes the Plus/4 so why should you? Is it because you don't know a good computer if it came up to you and punched you in the face or are you just plain thick?

Mark Storey,
Sheffield.

The Plus/4 is just fine for programming but most of us would like to do more with it. So tell us more about this excellent software and large range of peripherals — we'd love to know.

Plus Points

I am the proud owner of a Commodore Plus/4. I was recently browsing through an old copy of Commodore User when I said to myself, "Where's the C16 and Plus/4 programs?" I was relieved to find one item on the Plus/4.

But in April's issue I was astounded to see five reviews! Yes five, all to the Plus/4 and the C16. (Also a review of "ACE").

Many thanks to all at CU for the interest shown in us Plus/4 owners.

Richard Chatham,
Yorkshire.

Listening In

With reference to N. Cavale's letter (April 1986). There is another way of listening to what is loading rather than taking a piece of your tape recorder apart. Simply turn up the volume on your T.V./monitor and type in POKE 54296,15. Then load your program. This will allow you to hear the program being loaded. However, it does not work on fast loaders which have music while loading.

Colm Houlihan,
Dublin.

Tick-Tock

I am writing to inform other Plus/4 owners that your Type-in Program in the April issue that was exclusive to the C128 works perfectly well on our much maligned machine.

All that is required is alterations on three lines as follows:–

Change the color command on line 40 to COLOR 0,2 : COLOR 4,1; line 140 to COLOR 1,1 and the sound command on line 255 to SOUND 1,1000,5.

Then all that is needed is to type in the correct time when instructed and press RETURN.

Peter James Smith,
Birmingham.

Fox Hunter

You must be pretty hard up for things to write about on Commodore User. In the April issue, on your so-called 'Hotshots' page you not only mention the new Samantha Fox Strip Poker game but you include a photo of her with a typically sexist and smutty caption. Do CU readers really enjoy your bicycle shed humour?

What do I find when I open the May issue? Surprise surprise, yet another story and picture of the aforementioned Miss Fox — this time with a tasteless reference to hairy armpits. This is not surprising since your editorial team consists totally of men.

Samantha Fox exploits her body to make money but what really gets up my nose is that people like you eagerly jump on the bandwagon to give her even more exposure. What will you be putting on page three next month?

Linda Thomas,
Beckenham

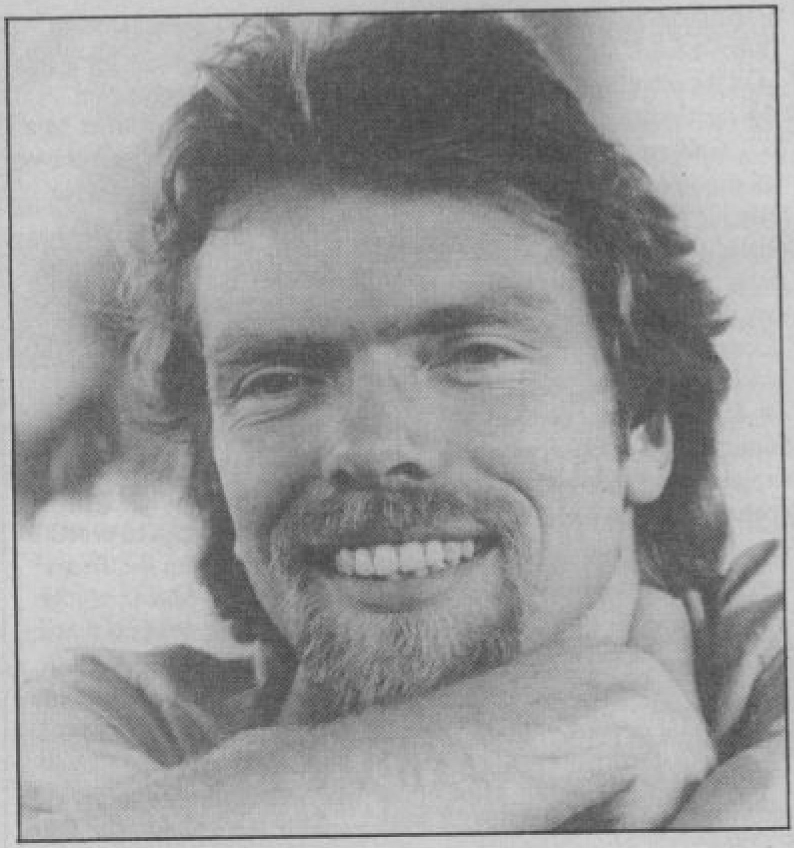
It's our job to report what's happening. Sam Fox is big news whether you like it or not. We agree that Strip Poker is tacky. We disagree with the exploitation of women and our captions were designed to send up her and the game's creators. We also enjoy bicycle shed humour.

If you don't want to see nude women, don't buy The Sun — there are plenty of alternatives. And that goes for games too. By the way, next month's page three will be — The Contents Page (nudge, nudge, wink, wink).

Letters, Commodore User, Priory Court, 30-32 Farringdon Lane, London ECIR 3AU.

BUZZ

Branson expands Virgin



Jet setting pop music and airline business tycoon Richard Branson is making a further cash investment in his software company — Virgin Games.

His company recently announced that they would be taking over New Generation and Leisure Genius.

Branson told CU in an exclusive interview "the computer games business is here to stay and Virgin will be a major player in that business as it develops both in Europe and the rest of the world".

New Gen are best known for *Trashman* and *Jonah Barrington Squash* and have been contracted to program seven games for Virgin under the direction of chief programmer Malcolm Evans.

Leisure Genius will work on conversions of their popular board game titles — Monopoly, Scrabble, and Cluedo as well as developing further board games and an original arcade game to be launched at the end of 1985.

Meanwhile Virgin's own snail-like progress to launch the long awaited Dan Dare and Shogun has speeded up considerably.

Virgin spokesperson, Nick Alexander said: "Shogun will be launched on the 26th May and Dan Dare will be out in August".

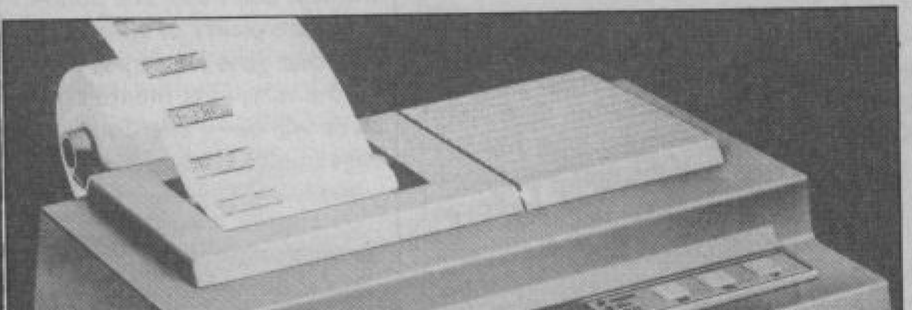
"Dan Dare has been severely delayed," Alexander admitted, "but I can assure games players that it is going to be well worth the wait".

Publicity master Branson who is rumoured to be a Tory candidate for Parliament in the next General Election — intends to make a personal appearance in a forthcoming Virgin game later this year.

Virgin Atlantic Challenge will enable the games player to captain the Virgin Challenger and run the business empire at the same time.

Described as a cross between a simulation and an arcade game it is thought to involve trans-Atlantic telephone calls with pop stars like Boy George and Phil Collins as the yacht is buffeted by gigantic waves. Sounds fun.

In the running for the Ugliest Printer of the Year Award is the this little monster from Citizen. Designed for all Commodore home computers, it prints in two colours, using typewriter ribbons and standard 4 inch wide paper. Other features include Commodore and dot-addressable graphics, Epson control codes and expanded print. Short on good looks, it looks a snip for £50.



IN

Green Beret, Uridium, Solo Flight II.
Commodore User
Andrew Braybrook, Dave Collier
Karen Grant
Commodore Amiga
Simulations
Wild Bill Stealey
Cheapo Games
Football (still)
Winter
Half Man Half Biscuit

OUT

Way of the Exploding Fist, Bounder, Elektra Glide.
Country Living
Jeff Minter, Tony Crowther
Samantha Fox
IBM PC's, Vic 20's, and ZX81's
Adventures
Clive Sinclair
Pricey games
Tennis
Summer
Sigue Sigue Sputnik *(were they ever in? Ed)*.

HAPPY HACKER COMPETITION

We asked you to answer three simple questions to win a copy of Geoff Wheelwright's book "The Hackers Handbook". The answers were Wargames, Duke of Edinburgh and MUD. Ten lucky winners get a copy each:

Nick Marshalls of Newbury, D Edwards of Sutton Coldfield, S Gasser of Staffs, John Pelan of Dublin, P Walker of Grimsby, A Hurley of BFPO 42, GP Hart of Skelmersdale, BR Cossins of Lancs, T Porter of Devon and Gary Saxton of Nottingham.



Corby sold

Two years after it opened in a blaze of "We're backing Britain" tub thumping Commodore have put their hi-tech computer factory in Corby up for sale.

The computer manufacturing plant in the East Midlands is one of the most advanced plants in Europe and it is expected to attract a number of interested buyers.

Six months ago Commodore switched the manufacture of 128s and 64s to Germany.

Commodore's new spokeperson, Lucinda Taylor Young told Commodore User that there would be no further lay-offs of staff at Colby.

The present administrative and servicing facilities at Corby maybe continued under a leasing agreement with the new owners of the plant.

The sale of Corby happens at a time when speculation on Wall Street is growing daily about the future of Commodore. The company is still losing huge sums of money, have failed to agree a facility with their bankers, whilst doubts are increasing about their wonder machine — the Amiga.

Shattered Dreams

A scheme by CRL to get children to sell games software in their schools has been shot down by GOSH, the Guild of Software Houses, which was formed to help regulate the industry.

The *Dreamseller* scheme, advertised in Popular Computing Weekly, was to involve schoolchildren taking orders at their own schools, for games which they'd then buy from CRL at a discount — so they could make £1.95 on a £5.95 game and £3.95 on a £9.95 game.

Although distributors and retailers got very upset about this 'sales stunt', CRL's Greg Duffield is unrepentant. He maintains that encouraging kids to become sales reps was not the main idea. "We wanted to get good feedback on our products from kids themselves, what they like and don't like, to help us produce what people really want".

He claims that application forms needed parental consent and that kids were under no obligation to buy goods from CRL, nor would they be indebted to the company. Duffield reckons that out of over 300 replies, he got around 80 potential Dreamsellers. Now he's looking of other ways to get 'feedback'.



Cradling a bottle of champagne is the UK's supreme Elite champion, Colin McLinton from Belfast.

Colin beat eleven finalists who had qualified in Firebird's month by month competition and now goes on to compete in the Elite World Championships next year in New York.

Pictured with Colin are the game's two designers, Ian Bell (left) and David Braben, Herbert Wright, Firebird's publisher, just gets in the shot on the far right.

COMPETITION

C16 COMMANDO

We reckon that just about every C16 owner in the country — in the world — sent us an entry for their chance to win Elite's *Commando* for the C16. And most of you got the correct answer of B, A and A. Still, we had to restrict the winners to 50. And here they are:

Martin Bigg of Leics, Lee Jones of Devon, David Dunnings of Sussex, Craig McFadden of Glasgow, Mark Partridge of W. Midlands, Scott Coulthard of Blackpool, Michael Fucile of Sunderland, Andrew Russell of Gwent, David Black of Gateshead, Ashley Biggin of Kent, Des Watson of Manchester, Andrew Hopkinson of Yorks, Darren Proffit of Notts, Andrew Wilding of S. Wales, Paul Joseph of Wilts, Marcus Walter of London, Andrew Hollyhead of W. Midlands, Gary Newton of Stockport, Robert Comley of Wilts, Jonathan Verry of Glous, Craig Spink of Staffs, Robert Sherwin of Bristol, Omar Hussain of Herts, Allan Cain of Blackburn, Darren Fletcher of Walsall, Ian Best of Worcs, Garry Spence of Sterling, Alan White of Leics, Mark Diaper of Leics, E McNeill of Birmingham, Iain Phillips of Hants, Paul Tomlinson of Notts, Bernard Gravillis of London, Kelly James Bowers of Bucks, Christopher Black of Herts, Daniel Kelly of Glasgow, Andrew MacNeil of Ipswich, Robert Inman of Rochester, Martin Dench of E Yorks, Stuart Jones of Sheffield, Terrance Fogden of Hemel Hempstead, Robert Spoiles of E Sussex, Nigel Williams of Suffolk, Neil Rose of Corby, Darren Hewitt of Warwick, Timothy Seville of Crewe, Trevor Flunder of Suffolk, Lee Holden of W. Midlands, Neill McDermot of Manchester and Karl Turner of Hereford.

Chess moves: Audiogenic has, at last, introduced a version of its Grandmaster chess program that's specially designed for the Plus/4. Apparently, the aforementioned had trouble running the C16 version. It costs £8.95 on tape and features things like automatic queening, castling and en passant, ten levels of play, 'hint' function, changing level of play during a game and taking back a move. More details on: 0734 303663.

Anatomay of a 128: At long last, a really comprehensive reference book for the 128. Called *The Anatomy of the Commodore 128*, it's a Data Becker book published in the UK by First Publishing. Not exactly cheap at £12.95, you do get 480 pages and probably all the programming and technical information you'll need, including a useful ROM listing. Also in the series, there's *Tricks and Tips for the C128* (also £12.95), described as "a tremendous treasure trove of programming techniques" both in Basic and machine-code. First can be contacted on 07357 5244.

Telly Connect: Sabre Technology claims to be the first company to offer a device that lets you connect your 128 to a TV set and get an 80-column display — monochrome only, though. It's called *Teleconnect-80* and costs £14.95. According to Sabre, "even on the worst televisions the display is usually perfectly readable". You can get in touch with Sabre at 28 Askerfield Avenue, Allestree, Derby DE3 2SU.

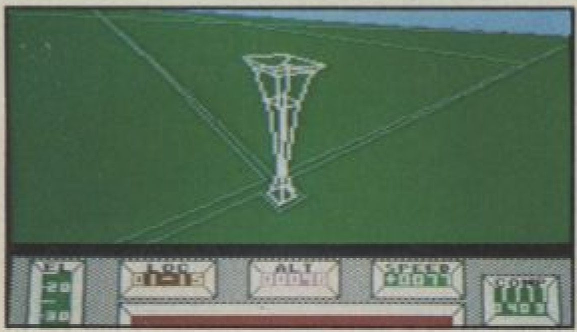
Head Banger: Robtek has just announced a disk that claims to realign the head on your 1541 or 1571 disk drive without you having to attack the drive with a screwdriver. Called the *Magic Disk Kit*, it costs £19.95 and also includes a speed test program, a head cleaning disk and a book of simple maintenance tips. You can get more details from Robtek on 01-847 4457.

Green Fingers: Do you know what plants will and won't grow in your garden? Find out (in the comfort of your armchair) say Phoenix Publishing, the people behind *The Planter's Guide Pack*, a program for the Commodore 64. The guide lets you input the conditions of your garden and select all the plants (from a list of over 1,000) that will grow there, together with their funny botanical names. It costs £14.95 and includes The Planter's Guide Book. More details on 0923 32109.

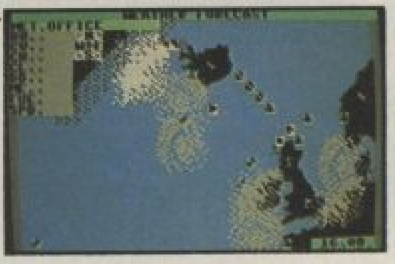
BUZZ



This is an artist's impression of Sigue Sigue Sputnik. Pretty horrible really isn't it? That's realism for you. It popped through our letterbox recently, presumably to promote the group's second single Twenty First Century Boy. Tony James mouth(piece) for slaggy old glam copyists Spit Spit Spaznik is apparently a computer games freak. Wow. Bring back Marc Bolan.

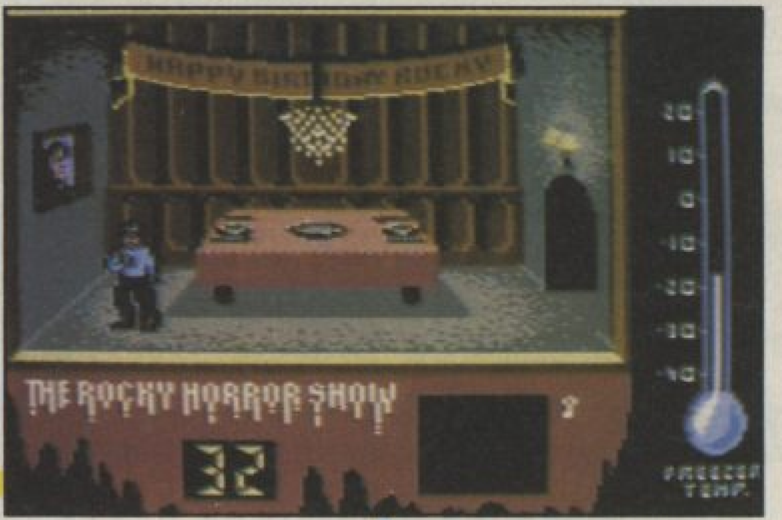


Why are we printing an old picture of Mercenary you're wondering? Well we're not. Plus/4 owners dance around the room for this is indeed a version fit for your micros and it should be in the shops right now, price £9.95. Also coming shortly is the targ escape kit from Novagen. It contains masses of maps and information about the game, price £3.99



And now for the weather forecast. Well actually it's the forecast for the North Sea in 1940. It's part of PSS's Sink the Bismark in which you have to stalk the pride of the German fleet and stop it from ravaging the Allied shipping. The game features the usual historical accuracy but promises a strong arcade sequence which lets you lob shells at the ship.

CRL bear the distinction of bringing out one of the first games purely for 128 owners. It's actually an enhanced version of their Rocky Horror Show hit with high definition graphics, new sprites, more locations and better music. It all sounds pretty impressive and it'll only set you back nine pounds. So make ready to do the Time Warp all over again.





This is an early screen from Elite's forthcoming *Ghosts and Goblins* conversion. The mammoth Capcom game is due out shortly price £9.95. Look for a first review in Commodore User.



Surf's up with the impending release of New Concept's *Surfchamp*. Originally released on the Speccy it's now been converted to the 64 for the summer season. So wax down your micro and make ready to ride those rollers breaking on the living room floor.

Can any of you remember the Tubular Bells album (muso generation circa 1975)? Would any of you like to hear it played by a Commodore 64 whilst psychedelic patterns and laserium effects whirl around your screen? Probably not. That hasn't stopped CRL producing a program that does just that. It's called Tubular Bells, it costs £7.95 and we're totally baffled by it.





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Commodore User are also commemorating the 1986 World Cup with a competition of our own.

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1


2


3

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6




4



Second Prize.

Ten runners up will receive a copy of World Cup Carnival.

Name ....

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Player 1 ....

Player 2 ....

Player 3 ....

Player 4 ....

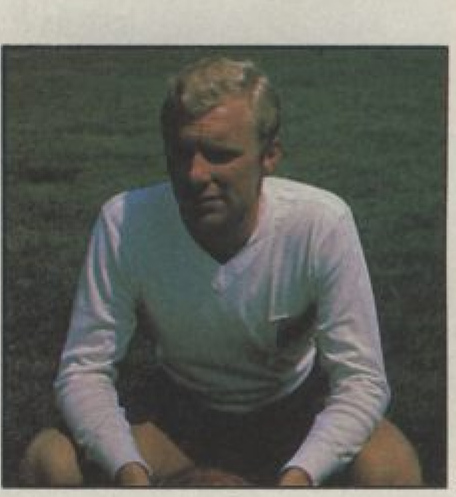
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5

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● V

COMMODORE 64/128 OCEAN

Price: £8.95/cass

In Ocean's latest licensed epic 'V', the world is yet again under threat from alien beings who want to rule Earth (yawn). Mike Donovan has different ideas and decides to put an end to the visitors' evil doings, so he sets out to infiltrate and destroy the scaly reptillians' mothership.

Once on board, he has an immediate problem, that is, how to open the hanger doors, so that he can explore the rest of the ship. Luckily, he bought a Communiputer in the duty free shop in the craft that took him to the aliens' mother ship and it can be used to crack the codes which lock the doors. Once he has cracked the code, he has to rush out of the hanger as the doors only stay open for a few seconds.

He is now out of the hanger but then remembers that he had to plant an explosive in there, and so has to repeat the procedure of opening the doors, and then rushes in to plant an explosive, and rushes out again, before the doors close.

Once out of the hanger, Mike searches the ship for important locations to place his remaining four bombs. He finds a laboratory, 'That's interesting', he thinks, but the doors are coded. The Communiputer comes in handy again as he decodes the door. Once inside he starts nosing around and notices a computer and stumbles across part of the formula for the Red Dust (which is poisonous to the aliens). 'That's interesting' he thinks and copies it onto the Communiputer then leaves.

Donovan is quietly walking along, when a small alien robot comes flying through the air, so he hides in what he thinks is a cupboard. He soon finds out that the cupboard is a transporter and he has been taken to another plane (section) of the ship. In this section he notices green squares on the floor, and decides to stand on one. Suddenly the molecules of his body are moved around a bit and he appears in different surroundings. 'That's interesting', thinks MIke, and wants another go (what about your mission, Mike?), he rushes off gleefully and plants some more explosives, (psycho!!!).

Towards the end of the game, when Donovan has planted his explosives in the five key points specified in the instructions, and completed the Red Dust formula, he has to return to the hanger, board his ship and return to earth, where he is greeted by his friends and they all live happily every after.

'V' is a very complicated game, there are hardly any instructions and you are not told what the icons mean. The graphics are of a very high quality and animation is superb, especially the somersaults. It demands a reasonable level of common sense to play this game but should join your collection if you enjoy a good arcade adventure with plenty of action and problems to solve.

Richard Bradbury



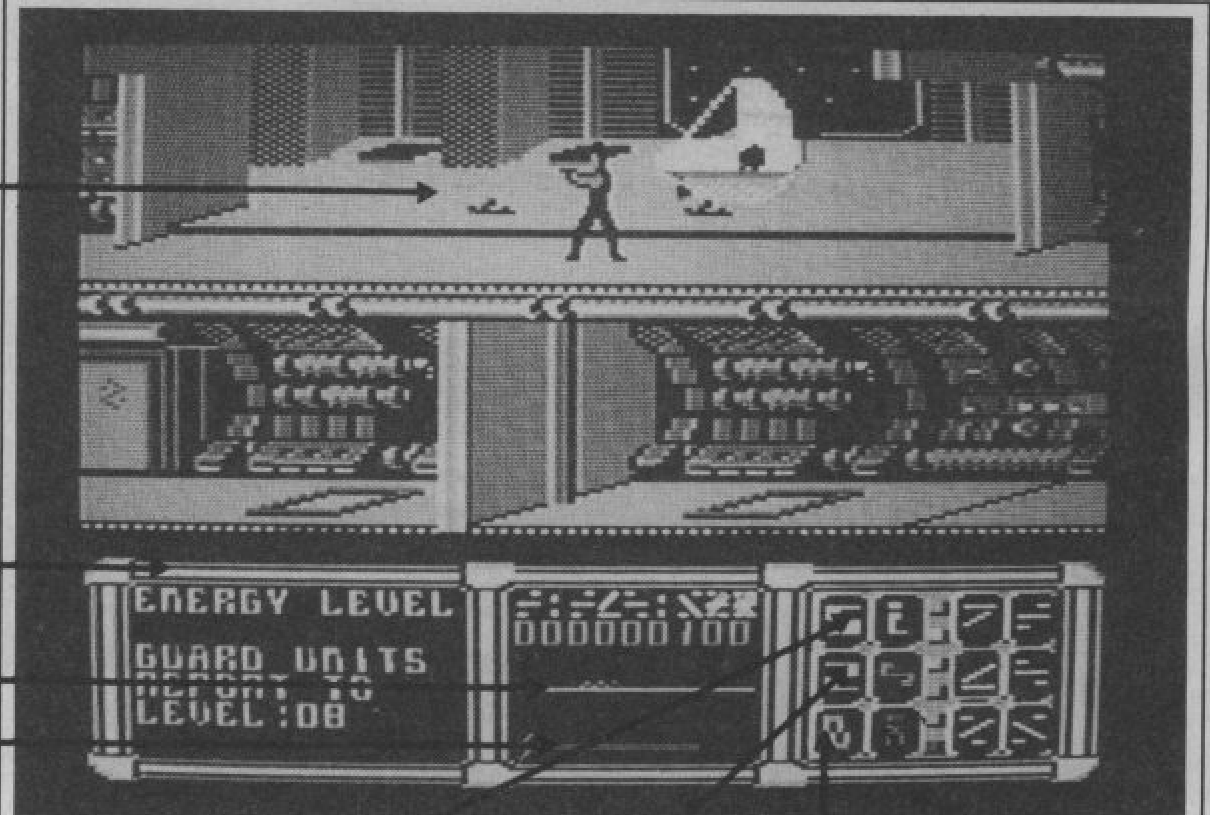
STOP PRESS

Good news for V fans — the evil villainesses Diana and Lydia will be returning to the small screen with a brand new series in the Autumn.

The last series ended with Diana escaping from justice — after attempting a coup. Catch next month's CU for a full report and a Players Guide to V, the computer game.

Graphics	1 2 3 4 5 6 7 8 9 10
Sound	1 2 3 4 5 6 7 8 9 10
Toughness	1 2 3 4 5 6 7 8 9 10
Endurance	1 2 3 4 5 6 7 8 9 10
Value	1 2 3 4 5 6 7 8 9 10

8 Overall



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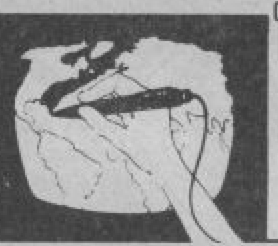
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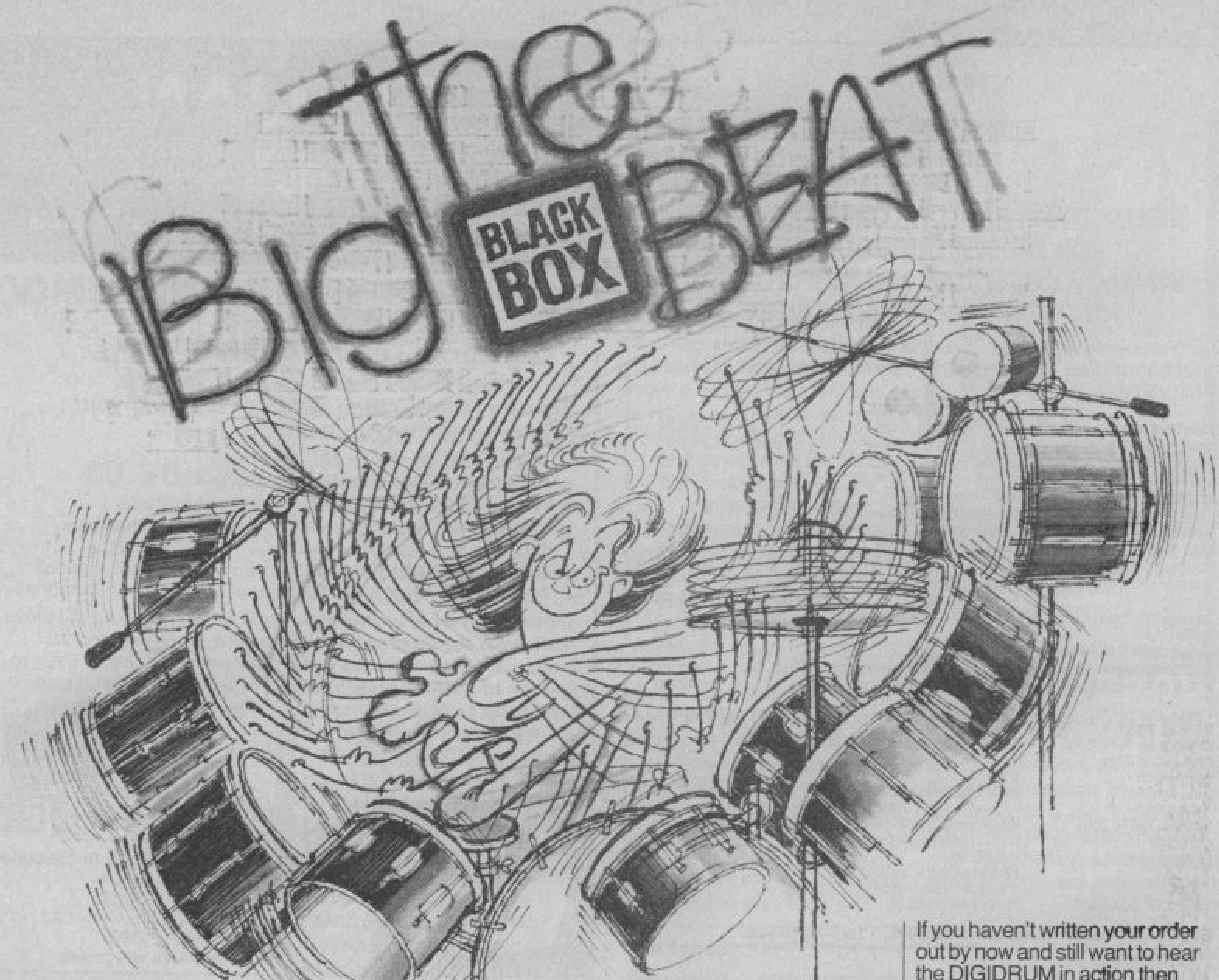
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SPINDIZZY

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When Spindizzy claims that it is a '3D game of skill' it's not kidding. It's a hell of a challenge. After continual practice my progress was still as painfully slow as my performance as dismal as when I loaded the game up.

The game scenario is not really worth going into. Spindizzy is a 3D skill test along the lines of *Marble Madness*. It isn't a straight copy like the disastrous *Gyroscipe* though, there's plenty of originality and depth there as well.

Like Gremlin's *Bounder* the idea is simple. You guide an object — you can choose a shape from a top, triangle or ball — round a network of blocks to collect jewels. The network is, of course, wickedly designed so that the jewels are unassailably placed around. Your route is a perilous mixture of slopes, gaps and narrow ledges. Margins for error are small and as you negotiate your way around the system the slightest slip will send you hurtling into space.

If all this isn't bad enough the clock ticks away whilst you struggle to complete the map. Collecting jewels gains you ten seconds each time, but falling off the edge results in energy being drained with a resultant further time loss. Using the space bar to slow yourself down is often unavoidable but the effect is only to speed up time loss. The dirty rotten £$$@**!!

If all that wasn't enough, other hazards like ice and changes of view so that you can't see what you're doing are all enough to have you take off to the funny farm accompanied by two men in white coats. The games three hundred plus screens should keep you there for quite some time.

Making a map is an absolute necessity if you want to get anywhere. You can approach an area from more than one direction. You'll have to do this because for in some places your sphere will disappear because of your angle of view.

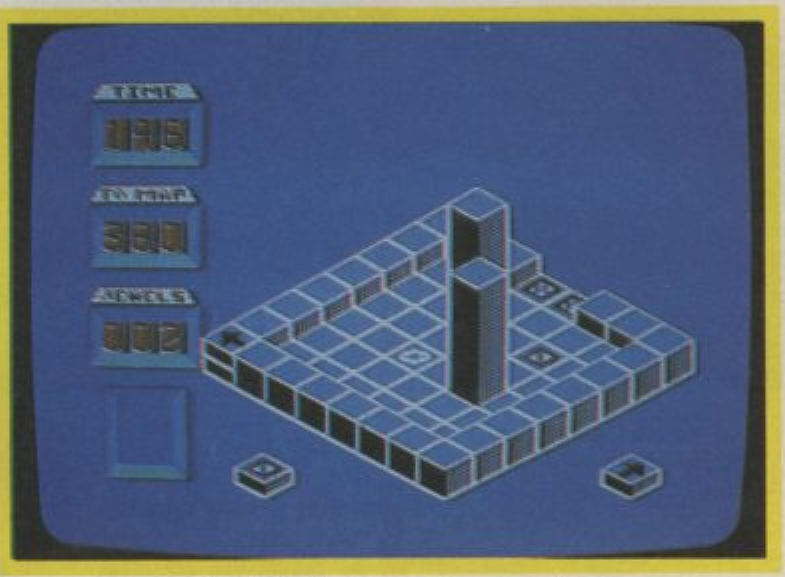
You are given an option for a monochrome view if you so desire to see what the game would look like if you were a dog.

Sound is minimal apart from the odd ping when you collect a jewel or touch a lift or shape tile. I must admit some sort of background noise might have improved it, but I'm glad the temptation to shove a tune in was resisted.

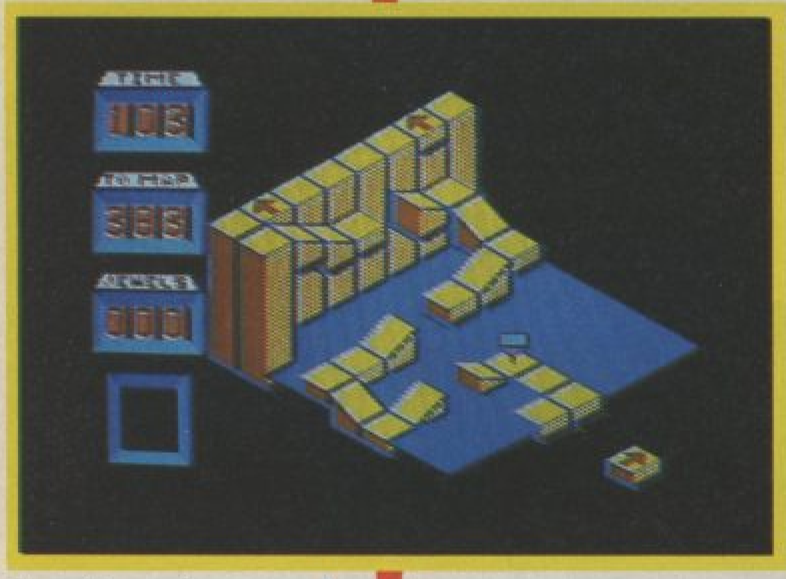
Spindizzy's graphics are excellent. The 3D effect works perfectly and movement is smooth and exact. All layouts are colourful although you

Programmer Paul Shirley must be one mean son of a byte to put something like this together.

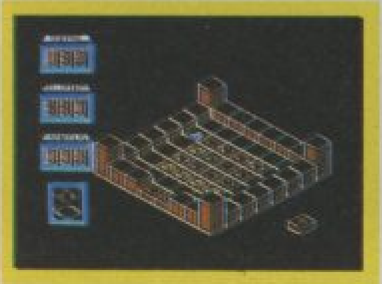
Mike Pattenden



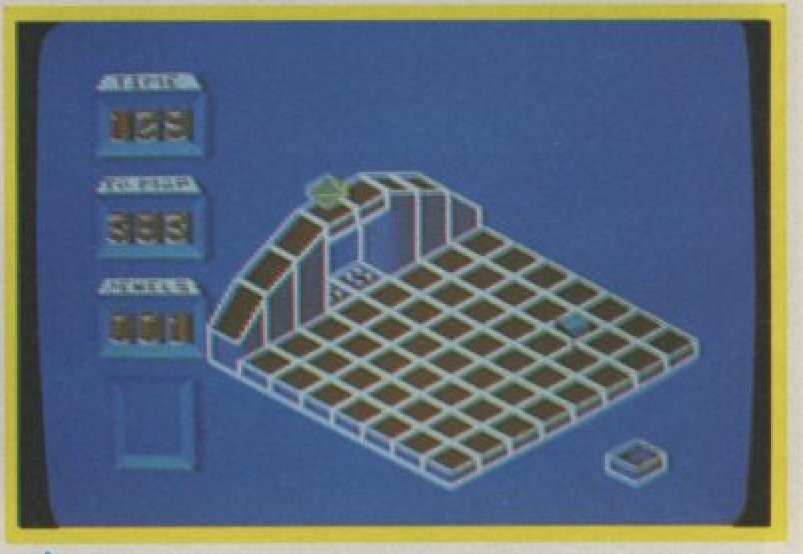
Run over the tile with markings to change the shape of the pillars in your favour.



A really nasty screen this one — plenty of space bar pressure needed here and that all costs time.



A mysterious screen — there's lots of tiles you can move over to activate changes elsewhere in the game.



Just how do you get the jewel on the arch?



Not too bad this one — save time on this screen.

Graphics	1 2 3 4 5 6 7 8 9 10
Sound	1 2 3 4 5 6 7 8 9 10
Toughness	1 2 3 4 5 6 7 8 9 10
Endurance	1 2 3 4 5 6 7 8 9 10
Value	1 2 3 4 5 6 7 8 9 10

9 Overall

STARQUAKE

COMMODORE 64/128
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Price £8.95

After cleaning up with *Starquake* on the Spectrum, Stephen "Wizards Lair" Crow brings the hit home to the 64.

Message has just reached earth of an unstable planet emerging from a black hole at the back of the galaxy. If the core of this planet is not rebuilt it will implode causing the whole universe to go "KA-BOOMF". That's a Starquake.

You, as B.L.O.B. (a bio-logically operated being) are chosen for this mission, but have you got what it takes to complete this five hundred and twelve screen arcade adventure?

You start the game on the top of the planet next to your ship. It's a long way to the planet's core so you will need some transport. A "Space Hopper" would be ideal if you could find one. This enables you to fly, as well as give you super-powered bullets which are essential against the nasties you encounter.

It is boosted when you bump into one of the many 're-equip' packs scattered around the maze. When your energy runs out you will lose one of your five lives.

Energy is shown on your flight board computer and is diminished by nasties. Next to that are two other bars showing how much ammo and platforms you have left. Platforms are your only means of travelling upwards when you are without a Space Hopper. These are very handy when it comes to picking up pieces of the planet core, as you can't pick these up when you're on the space hopper.

Extra lives can be won by finding the joysticks around the maze. Teleports enable you to get around quicker but you will need the passwords to travel from one location to another, (one of the teleports is right next to the planet core! But can you find it?).

There are also "Flexible-Thingydoos", which look like Access cards and let you through security doors and into Cheops Pyramids. Once in here you can trade pieces of the planet's core. However the Thingys will not let you through 'space locks' — for those you will need a key. (Easy isn't it!!!).

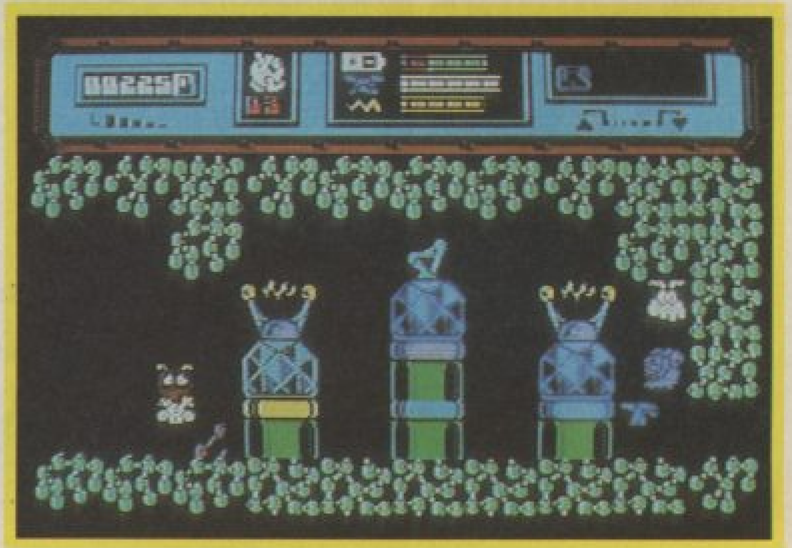
'Smash traps' are designed to block your path, but with a few platforms and a bit of height, you're through.

The planet itself holds its own hazards such as spikey plants which are deadly to the touch.

Critics may say this is just another arcade adventure but once you get hooked on it you'll begin to appreciate it's depth. Calling *Starquake* just another arcade adventure is like calling Uridium just another shoot-em-up, or the Pawn just another adventure.

Although the graphics are pretty Spectrumesque they are well drawn and have lots of variety, from bunches of grapes stuck to the ceiling to dead astronauts lying on the deck.

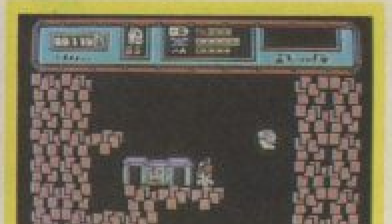
Sound is only average but it has many different tunes and good effects. **Ferdy Hamilton**



Fly above all hazards on your space-hopper.

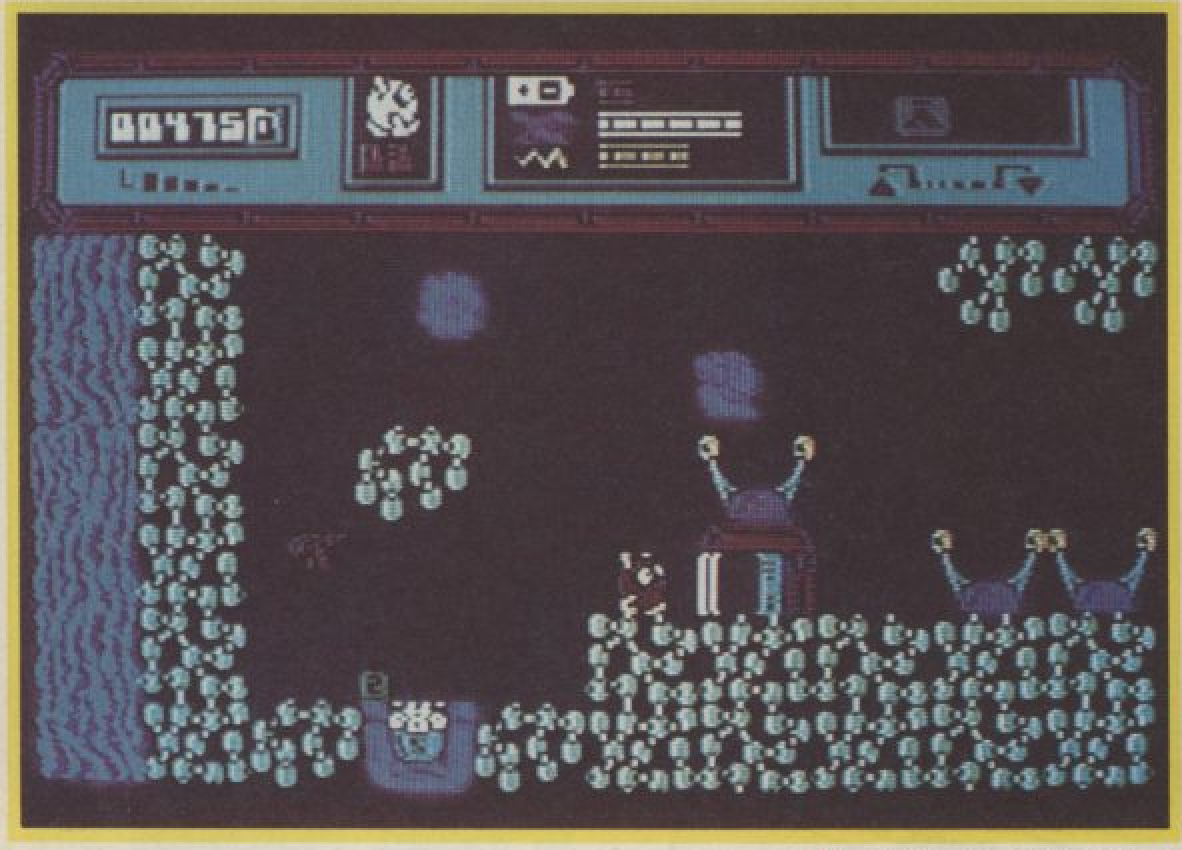


Every B.L.O.B's destiny — the planet's core. Can you get this far?

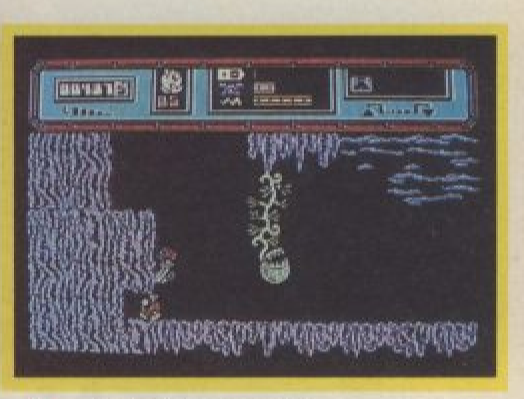


"I'm sorry sir, you can't come in. Jacket and ties only". (Or flexible Thingy-Doos).

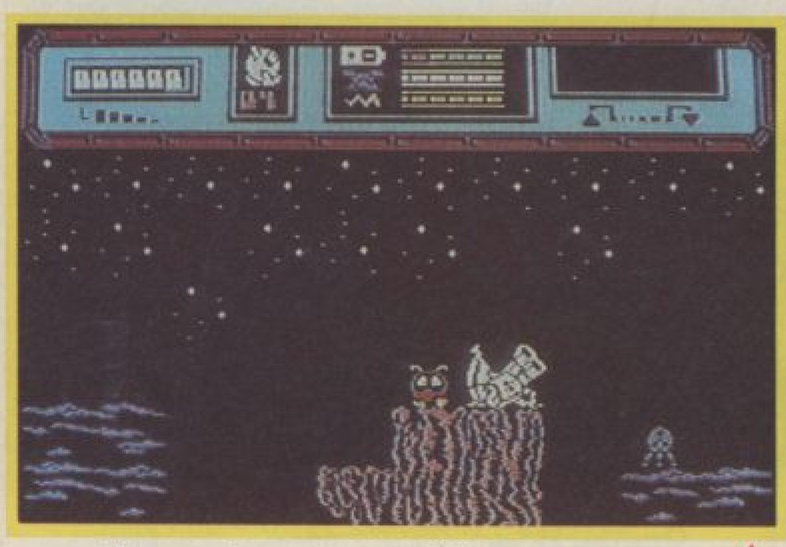
Screen Star



▲ Out of the lift and on the space-hopper.



▲ Into the secret passage but where will you end up?



The starting point — which way now? ▲



▲ Inside the teleport, now type a code.



Steve Crow is smiling because he has just been presented with the Golden Joystick award for Programmer of the Year by the Tube's resident nut — Jools Holland.

Steve designed *Starquake* and programmed the original version on the Spectrum. His partner Nick Strange did the conversion work for the 64 — adding in a number of frills and improvements like the superior animation of the aliens, BLOB's blinking eye-lids, and the scrolling score clock.

The Crow/Strange partnership were also responsible for the popular *Wizard's Lair* game that charted last year. But despite Steve and Nick's obvious delight at "beating the big boys" there were no champagne corks popping in the Bubble Bus offices.

"We just went to Macdonalds", said Nick. "We were pretty busy working on the 64 conversion at the time".

	(scale 1–10)
Graphics	6
Sound	7
Toughness	8
Endurance	9
Value	10

9 Overall


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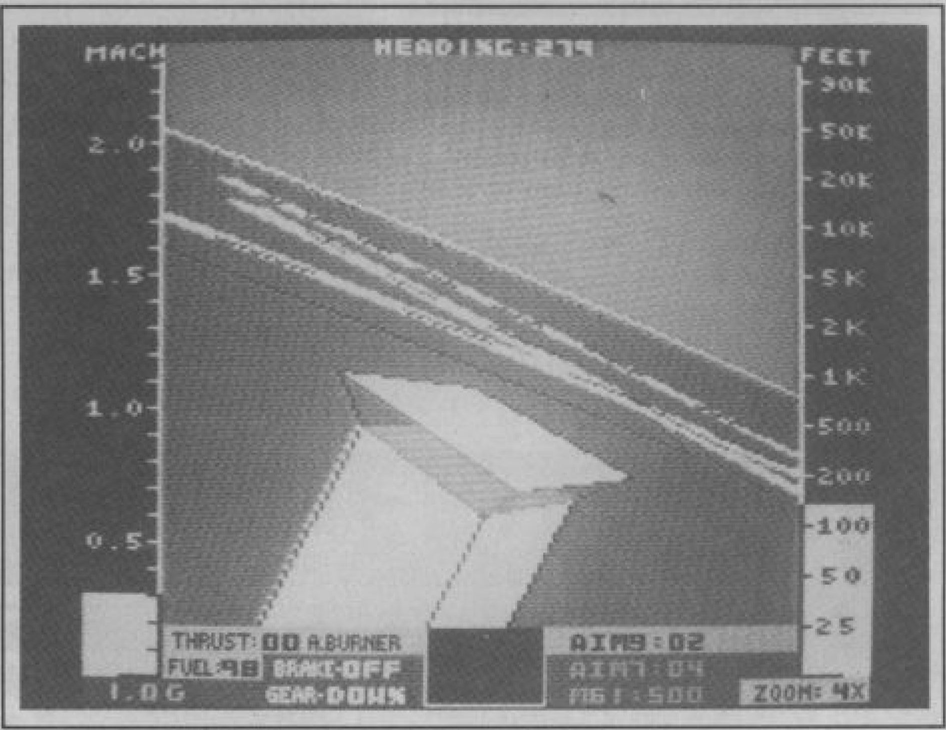
It's quite a change from Concorde, sitting in the cockpit of a jet fighter. Before you go anwhere though, there seems to be as much to do.

To start with, you're given a choice of five game modes: *Dogfight, Target Strike, Free Flight, Demo* and *Scenery* (you'll need to shell out on one of the optional scenery disks for the latter). Then you select the degree of difficulty, ranging from Practice through Easy to Difficult.

The next stage is to choose the particular aircraft type: either an F16 Fighting Falcon based on an airfield, or an F18 Hornet on a Nimitz-class aircraft carrier. Finally, you must arm your plane with appropriate weapons from the huge arsenal at hand.

At last, we're ready to takeoff and confront heavily armed M21 or M23 fighters in Dogfight mode, or strongly defended surface targets if you've opted for a Ground Attack sortie.

But before you start revving up. you'd better make sure you know all the controls available to you — and there's lots of them. Aircraft pitch and roll control, as well as missile and cannon fire, can be controlled by both keyboard and joystick. All the other functions are keyboard controlled.



F-16 approaching control tower.

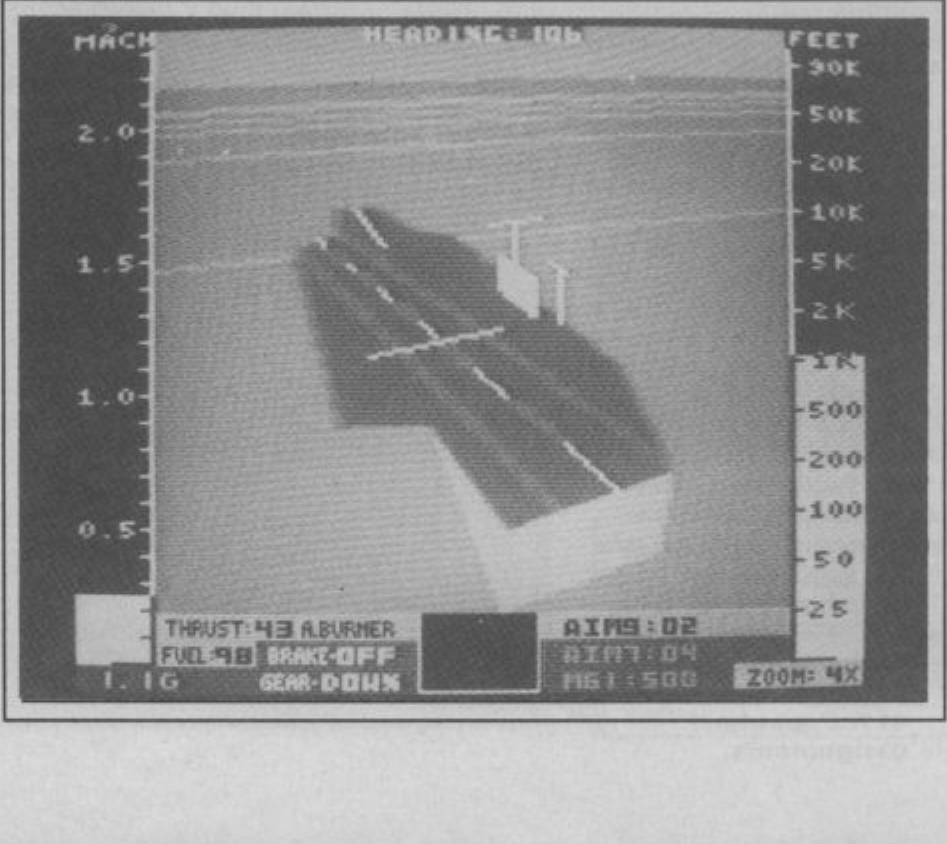
	Score (1–10)
Graphics	8
Sound	6
Toughness	7
Endurance	8
Value	6

7 Overall

These include: eject sequence, altitude indicator, left/right/front/back view select, zoom and control tower or flightdeck view of runway. There's also throttle and afterburn control, landing gear, airbrakes and radar on/off. So there's a lot to get to grips with if you're going to complete a successful mission. The problem is remembering what does what in the heat of the dogfight.

Let's get airborne. I did a couple of Free Flights before going for a dogfight mission in an F-16. I'll be honest, I found it all pretty difficult. The main problem was the lag between making a command and the aircraft responding to it. So I tended to overcontrol. Certainly nothing like my Concorde — that gives an immediate response.

With experience, though, you develop the knack of anticipating what's required to get the desired result. Having said that, I never succeeded in landing on the runway



F18 on carrier-landing approach.

continued over



Meet CU's latest recruit — Concorde Pilot, Captain John Hutchinson.

Captain John normally spends his time ferrying the likes of Joan Collins and Rod Stewart around the world.

In the last few weeks he has flown some different missions — namely Solo Flight II and Jet on his Commodore 64.

Before joining British Airways to fly Concorde he was in the R.A.F. — so he has had a wide and varied experience of flying. You can read Captain Hutchinson's professional view of the latest flight simulations around exclusively in Commodore User. Next month Captain Hutchinson checks out Acro Jet.

continued

with the F-16 or on the carrier with the F-18. Again, it was that timelag problem.

The simulator doesn't allow you to fly a true circuit before final approach and landing. So it's no good keeping a mental picture of where you think you are in relation to base. Instead, the technique seems to involve following an arbitrary set of instructions culminating in a turn into 080 degrees for the final approach.

Since landing was beyond me, the only way I could live to fight another day was to eject from the plane — an extreme measure but it worked.

Still, I found no problems with takeoff, and the dogfight and Target Strike games proved to be so entertaining and absorbing, I nearly missed a scheduled flight to Bahrain.

I had some success in hitting my targets and avoiding missiles fired at me thanks to the highly manoeuverable qualities of the Fighting Falcon and the Hornet. The instrumentation available to you in a



▲ Control tower view of F18 in a dive

dogfight is more than adequate and perfectly clear and easy to read.

From a pilot's point of view, it would have been better if the flying control responses had more closely approximated those of a real aircraft. As it stands, it's a game which cannot pretend to teach the real skills of flying.

But don't let that discourage you. It's great fun and as good as any combat flight sim I've ever seen.

John Hutchinson

● SOLO FLIGHT II

COMMODORE 64/128
MICRO PROSE/ US GOLD
Price: £9.95/cass £14.95/disk

CU SIM SPECIAL

Micro Prose's *Solo Flight II* makes an interesting comparison with *Jet*. The most striking difference is that this is much more of a genuine flight simulator. Better than that, it features very high quality speech.

The flying control responses are more closely in line with the real thing and the instrumentation is similar to what you'd find in a Cessna 172 or equivalent type.

Orientation with the airfield is realistically achieved and it is quite possible to fly a conventional circuit to position yourself for a visual final approach and landing.

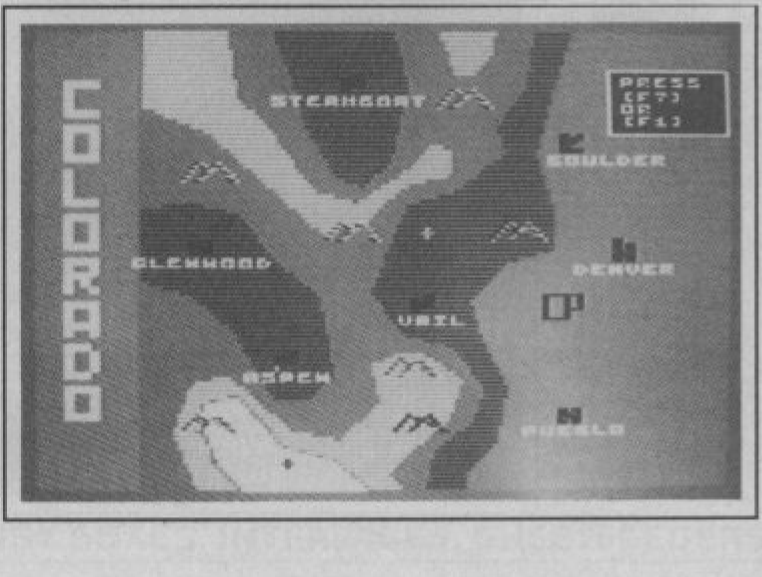
Happily for my credibility, I managed many successful landings and it was possible to judge the glide angle on approach reasonably accurately. Responses to control inputs from the joystick were immediate and conventional, and I was able to avoid any tendency to overcontrol.

There are two basic options: Flying Practice and the Main Run game. And you can select degree of difficulty in both sections.

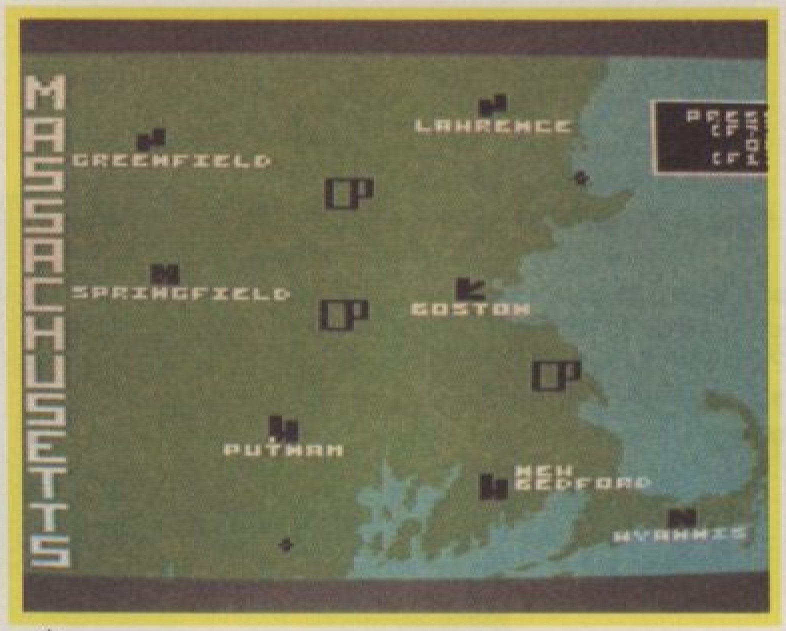
Flying Practice varies from clear weather to windy conditions to instrument flying with a low cloud base — there's even night flying. There's also an Instructor Option where a 'flying instructor' guides you



Above. Solo Flight II has been improved with the addition of speech and a new under a tenner price tag. ▲



Right. Map of the Colorado run — one of the toughest assignments. ▶



▲ **You can even fly over Kennedy County in Solo Flight II.**

verbally through a complete circuit — that's right, he actually talks to you. By the way, the Control Tower also talks to you on mail runs.

Apart from the flight instruments there are also landing gear and play position indicators, a fuel guage, navigational information to show your bearing and distance from a ground station, and even an engine overheat warning.

Once you've mastered the practice mode you go straight onto the Mail Run game — either as student or command pilot. The aim of the game is to deliver safely five bags of mail to their respective destination. But the more bags you load and the more fuel you carry, the more sluggish your plane becomes — to the point of not being able to take off. So you've got to decide what load you can safely carry.

Your destination dictates the level of difficulty. The Kansas run is nice and flat with wide runways. But Colorado involves flying through rocky terrain from high altitude airfields. Each of the six States available has its own particular challenge and there are navigation charts for all of them in the manual.

Before embarking on a flight, the State map is displayed so that you can refresh yourself on the terrain and landmarks en route.

The game ends when you've delivered the five bags (you can load mail at intermediate points) or when you crash. A nice feature is that after every sector, the State map will display the route you've just taken.

I found Solo Flight II to be a thoroughly entertaining and reasonably realistic flight simulator. It doesn't have the dynamic game plans of Jet but it does have more realistic flight characteristics and navigational challenges.

John Hutchinson

CU SIM SPECIAL

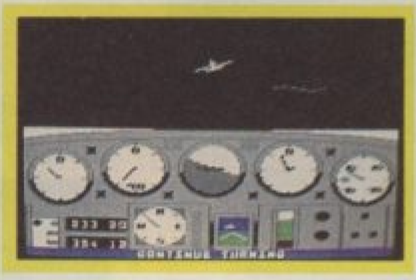
Our Concorde pilot preferred Solo Flight II to the flashier and more expensive Jet. ▼



▼ **Solo Flight II "realistic flight simulator".**



▼ **When you get good try flying at night.**



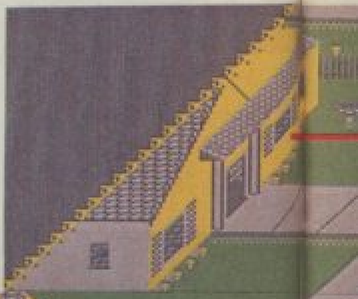
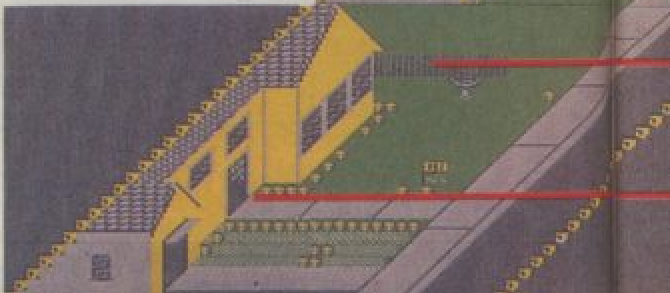
Graphics	1	2	3	4	5	6	7	8	9	10
Sound	1	2	3	4	5	6	7	8	9	10
Toughness	1	2	3	4	5	6	7	8	9	10
Endurance	1	2	3	4	5	6	7	8	9	10
Value	1	2	3	4	5	6	7	8	9	10

8
Overall

PAPERBOY

Elite's conversion of the Atari System II coin-op is fast approaching completion, so we thought you might like a sneak preview and a few useful tips of the game that's destined to be a hit on the 64.

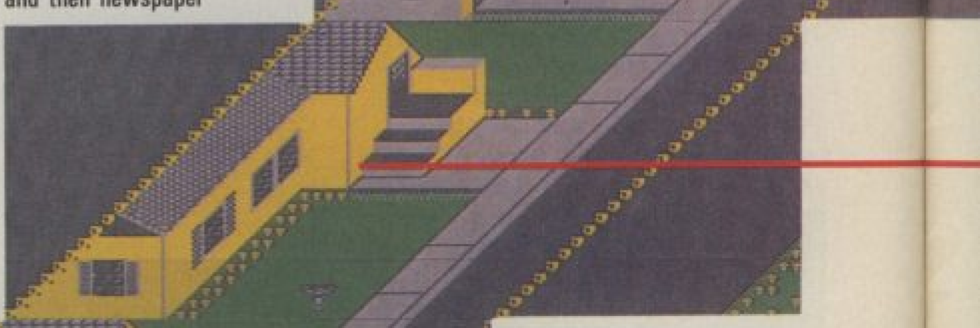
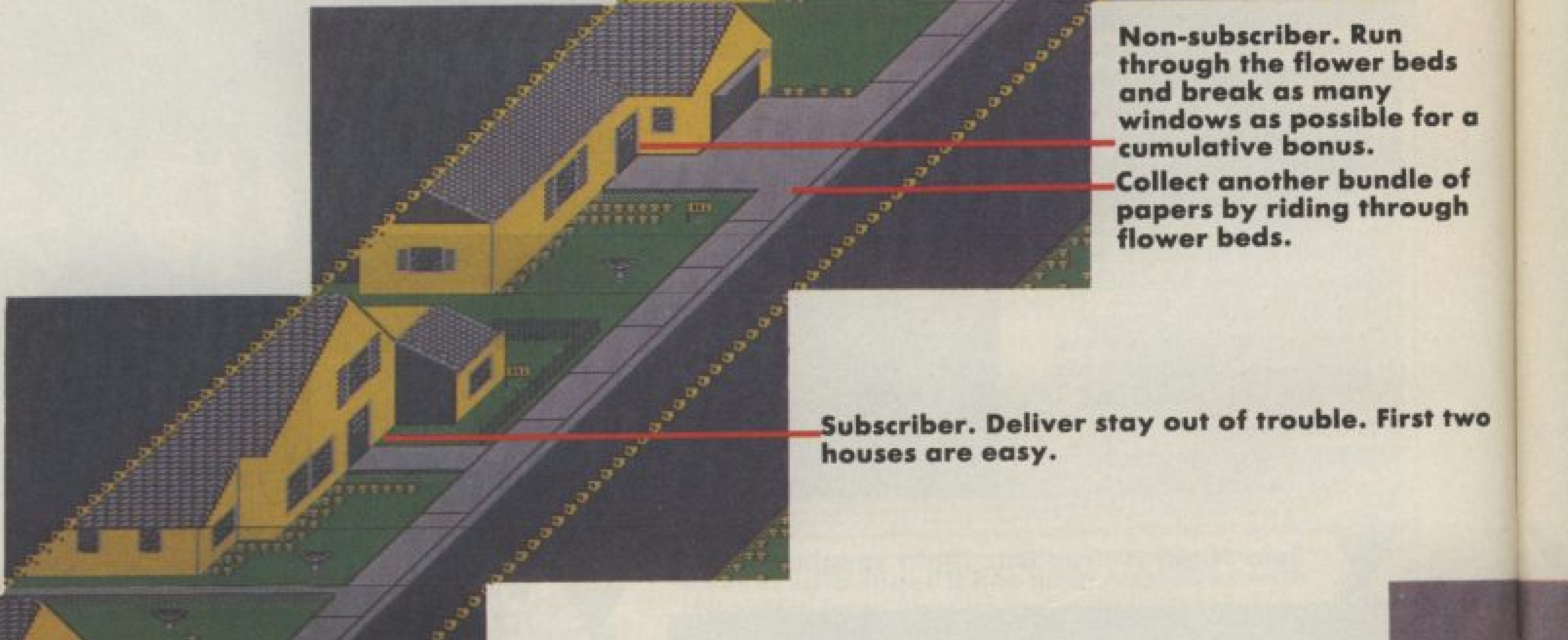
To that end we've put together a map of the first ten houses on Paperboy's round and got together with the game's programmers Neil A. Bate and Chris Harvey to produce a player's guide that'll get you started on the game. We've used a few pictures of the arcade game where appropriate to make things clearer. So get pedalling.

THE GAMEPLAY

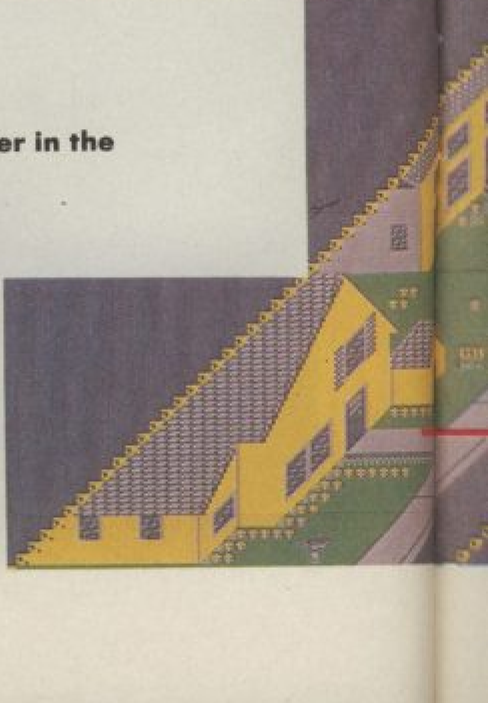
You are a paperboy working a seven day week delivering to a street of subscribers. There are twenty houses and ten regulars. Fail to deliver to any of them or cause any damage and you'll lose them. Eventually you'll lose so many that your irate employer will sack you and then newspaper headlines confront you screeching of "Worst ever . . ." A clean record, and the newspaper headlines pour praise on you.

You have three possible routes to take each day. Easy St, Middle and Hard. The first is obviously the simplest option. There are fewer hazards and a wide tolerance of inaccuracy on your paper throwing. After mastering this there's the Middle route. This is a posher area, the houses are grander and there are more fittings. That means more bonuses or, perhaps, more mistakes. Finally, the hard way takes it another stage further. Bigger, better and extremely hazardous.







GENERAL RULES

Subscribers: Do not ride over flowerbeds.
Do not break windows or any external fittings.
Just deliver to mailboxes. There's a bonus for direct hits.

Non Subscribers: Do as much damage as possible
Ride over all flowers, break windows etc.

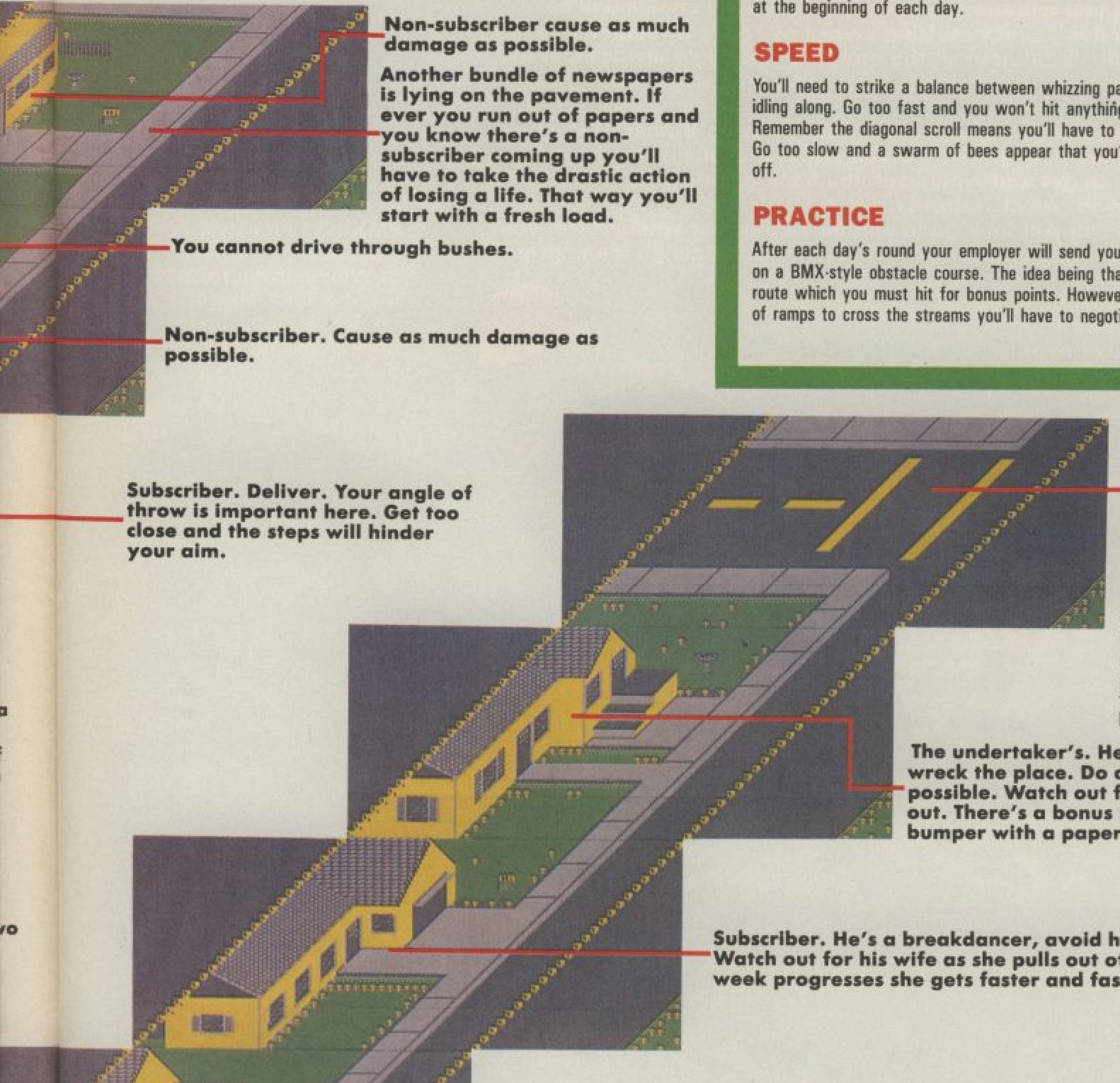
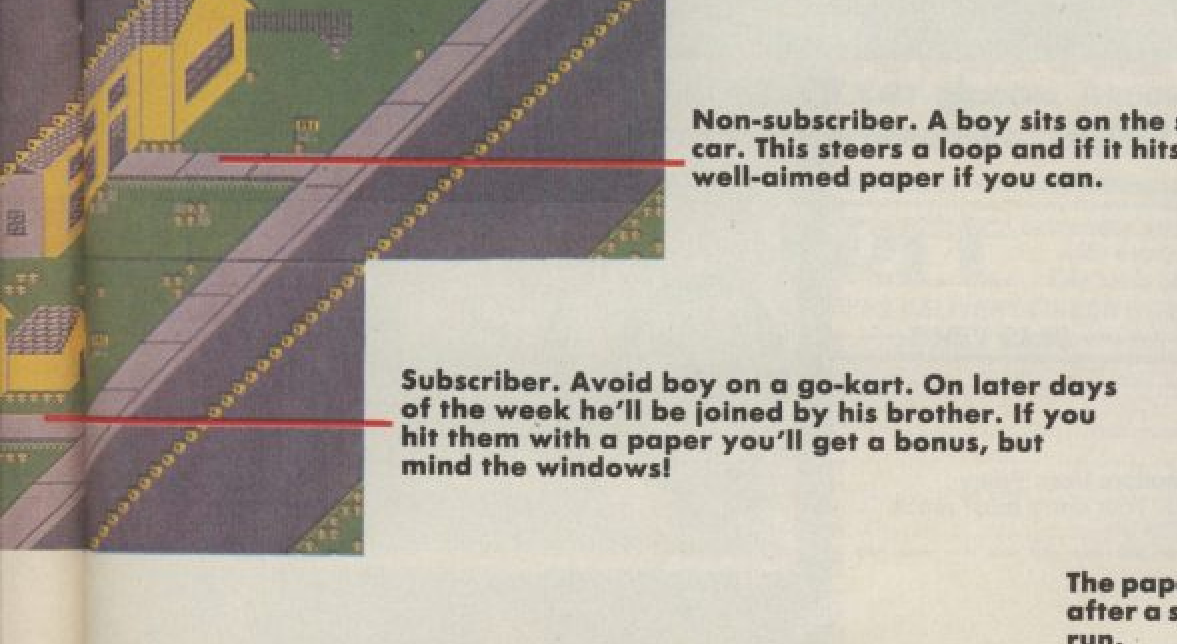
You know who the subscribers are because a little map shows you at the beginning of each day.

SPEED

You'll need to strike a balance between whizzing past everything and idling along. Go too fast and you won't hit anythiñg you want to hit. Remember the diagonal scroll means you'll have to stagger your shot. Go too slow and a swarm of bees appear that you'll struggle to shake off.

PRACTICE

After each day's round your employer will send you on a practice run on a BMX-style obstacle course. The idea being that Targets line your route which you must hit for bonus points. However, there's a system of ramps to cross the streams you'll have to negotiate as well.

Non-subscriber cause as much damage as possible.

Another bundle of newspapers is lying on the pavement. If ever you run out of papers and you know there's a non-subscriber coming up you'll have to take the drastic action of losing a life. That way you'll start with a fresh load.

You cannot drive through bushes.

Non-subscriber. Cause as much damage as possible.

The crossroads. Paperboy must negotiate the busy junction to go on to complete the second half of his round. On this level you must time it just right to get behind a sports car. Pause briefly in the centre of the road, and then cross after another car sweeps past. On later levels you'll have to deal with Hell's Angels.

Subscriber. Deliver. Your angle of throw is important here. Get too close and the steps will hinder your aim.

The undertaker's. He's a non-subscriber, so wreck the place. Do as much damage as possible. Watch out for his hearse backing out. There's a bonus if you catch the bumper with a paper.

Subscriber. He's a breakdancer, avoid his contortions. Watch out for his wife as she pulls out of the drive. As the week progresses she gets faster and faster.

Non-subscriber. A boy sits on the steps playing with a radio-controlled car. This steers a loop and if it hits you, you'll lose a life. Get him with a well-aimed paper if you can.

Subscriber. Avoid boy on a go-kart. On later days of the week he'll be joined by his brother. If you hit them with a paper you'll get a bonus, but mind the windows!



The paper's praise after a successful run.

WIN BMX BIKE and Raleigh team strip.

50 copies of the game up for grabs!

Become a real Paperboy and earn pots of money — well a little money. Alright, I know, delivering newspapers is about the worst paid job under the sun.

Anyway, if you win our fabulous BMX bike the choice will be yours. If you don't fancy stuffing copies of Today through letter boxes at some awful hour of the morning you could always just use the bike to impress your friends with some stunning Front Wheel Pogos and wheelies.

The bike we are giving away is a Raleigh Team Burner of the type preferred by the Raleigh team themselves. It is one of the best BMX's you can get and would set you back a good £300 if you were to buy it in your local Halfords.

Just so as you will look good and be safe whilst you perform your tricks Elite are also chucking in a helmet and a Raleigh team strip for good measure.

It is a prize well worth having as Summer draws near.

Even if you are not lucky enough to pick up the big prize there are no less than fifty runners-up prizes of the game itself worth £9.95 a piece.



How To Win

Answer these three questions about BMX biking and then tell us what cycle trip you would most like to go on should you win the prize.

1) Which computer games company sponsors a BMX bike team. (a) Beyond, (b) Quicksilva, (c) U.S. Gold.

2) Who is the current BMX bike Freestyle champion of the world?

3) Which of the following is not a BMX bike stunt. (a) Bunny Hop. (b) The Rock Walk. (c) The Triple Salko.

Answers: 1) .... 2) .... 3) ....

Tie breaker ....

....

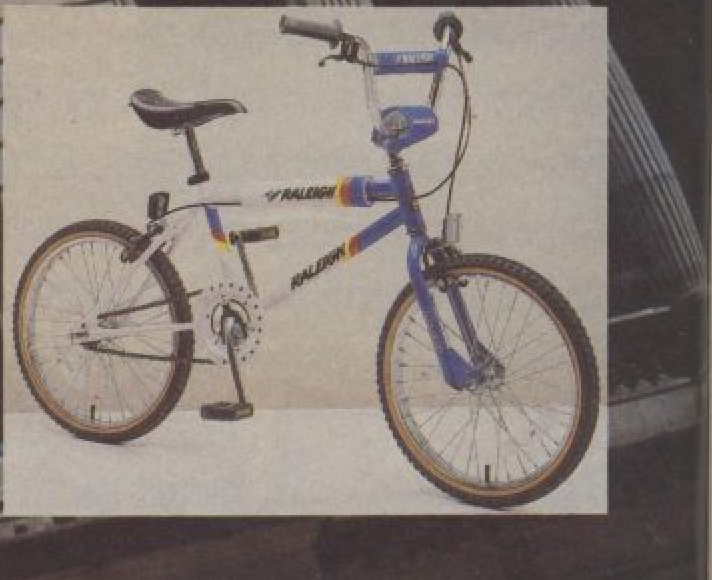
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Entries should be sent to Bike Competition, Commodore User, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU. Your entry must reach us by June 15th 1986.



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SOUTHERN BELLE

COMMODORE 64/128
HEWSON
Price: £7.95/cass

Back in my Grandfather's day, every boy used to dream of becoming an engine driver. Not the sterilised, characterless electrics of today's railways, but the giant smoke and steam belching monsters of yesteryear.

The London to Brighton railway line was built in 1837 and provided a quick route from capital to coast until 1932 when the line was electrified. The jewel in their crown then was the King Arthur class locomotives and Pulman luxury coaches, running non-stop between London and Brighton, and affectionately named the 'Southern Belle'. *Southern Belle* is, quite simply, a steam engine simulator of that very machine.

Driving a steam engine is not nearly as easy as you might imagine. Although you don't have to steer them, strict speed limits have to be adhered to, coal and water have to be used efficiently, and the passenger's comfort and safety must be looked after.

Your place in the proceedings is logically on the footplate, and your view of the engine's controls, the line ahead and various landmarks is most realistic.

From the opening menu, you can choose the type of journey you wish to undertake from an easy non-stop run to a journey including stopping at stations and obeying signals. When you've had some practice, you might care to try to beat the non-stop record or handle a heavy goods train.

In each mode, you can choose which of the engine's controls you operate, and which are taken care of automatically. The easiest mode being regulator, cut-off valve and brakes. More advanced drivers will be able to use the blower, injectors and dampers to obtain the best performance.

There are a multitude of controls. The regulator lever is used to apply steam to the pistons, and can be thought of as analagous to a car's accelerator pedal. The cut-off valve is used to alter the percentage of the cycle during which steam is admitted to the cylinders while the blower is used to maintain a constant gas flow over the fire. The damper wheel controls the amount of air fed to the fire and the injectors feed water from the tender to the boiler. Brakes, whistle and the fire door are also controllable, although coal is fed to the fire automatically. The various gauges in the cab allow you to monitor the steam pressure and water level as well as water temperature.

All the controls are operated using the keyboard, but I didn't find that too much of a hassle as you rarely need to do anything in a hurry! The screen display shows the engine controls and your forward view, while around it are arranged the signal indicator, digital clock (a little out of place, I feel), speedometer, gradient indicator and the name of the next station or tunnel. Pressing 'T' at any time will summon up a timetable with expected and actual arrival times, as well as indicating the next station you are expected to stop at.

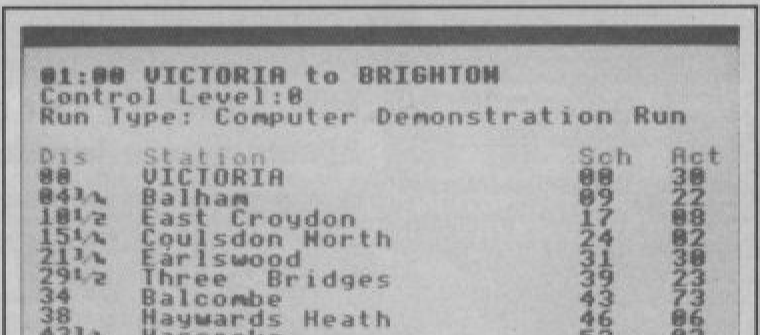
Shortly after leaving Victoria station, you will pass Battersea power station on your left before cruising through Clapham, Croydon and all the provincial stations along the way before arriving at Brighton. There are many tunnels along the route, and some have spectacular entrances.

There are many mistakes possible, the most fatal being derailment! Excessive speeding will cause this, while allowing the boiler to boil dry is also pretty nasty. These and other comments on your abilities, together

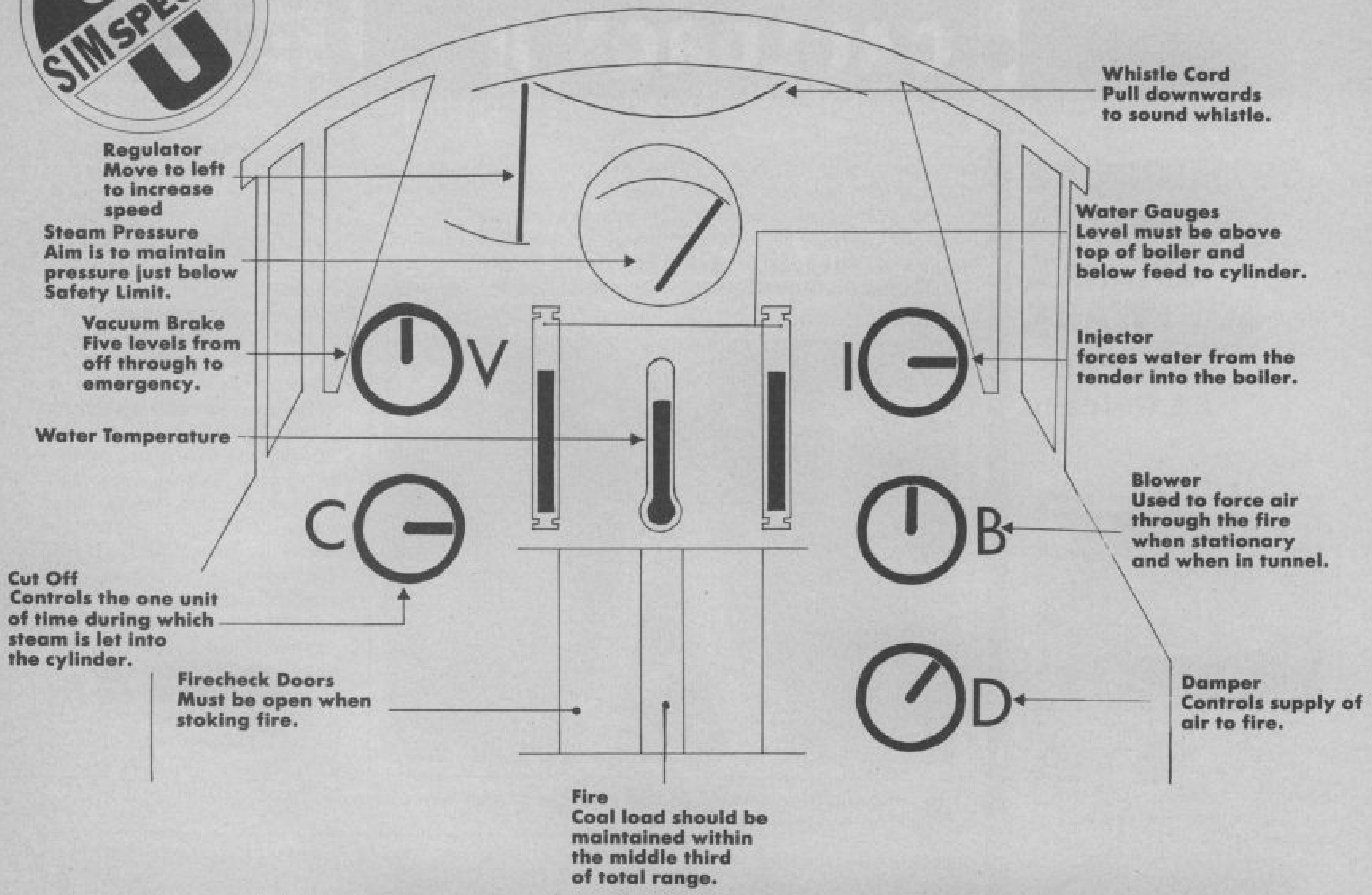


Southern Belle slows, and blows her whistle as she approaches Cane Hill Tunnel.

The time table — any readers out there in Balham, East Croydon or Haywards Heath?



CU SIM SPECIAL



with your final assessment, should you reach Brighton in one piece, are displayed on the events page accessed from the timetable menu.

At any point during a run, you can Save off, or Load, a previously Saved position. This is useful, as the whole journey can take over an hour to complete in real-time!

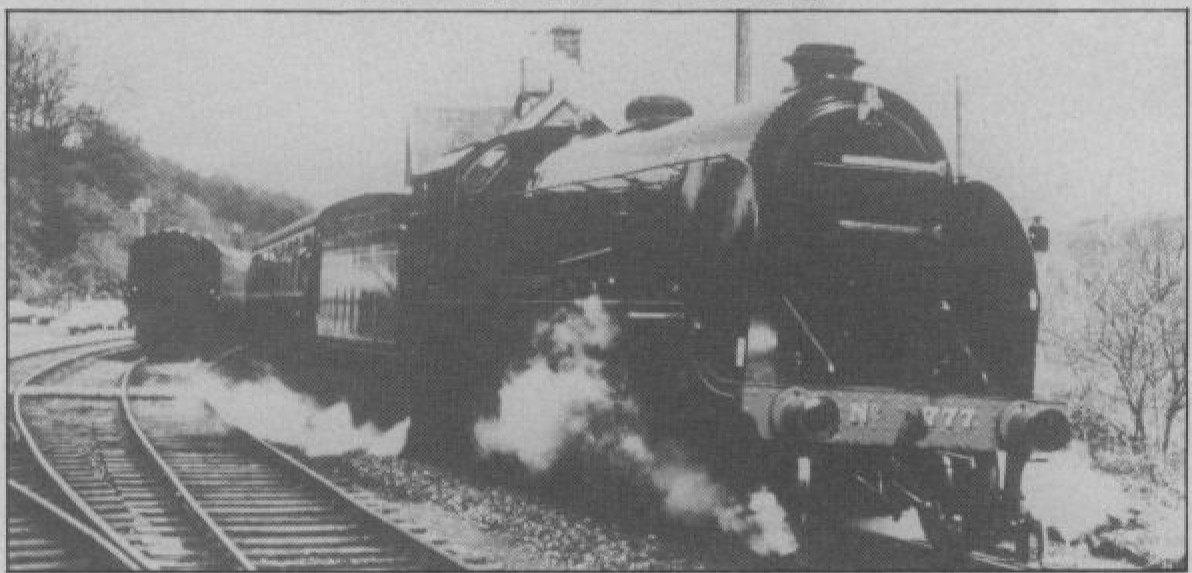
Southern Belle is a brilliant concept, expertly programmed and packaged, with clear concise instructions and historical notes. I've certainly had many hours of pleasure out of it so far, and I'm sure many others will become addicted to the beauty of steam through this package. Well done Hewson!

Fred Reid

Graphics	8
Sound	3
Toughness	7
Endurance	8
Value	8

8 Overall

THE REAL THING



The London and Brighton Railway company received permission to construct its line in 1837. The line was devised by Sir John Rennie and joined with the line of the London and Croydon Railway at Norwood. This gave a complete route from London Bridge Station to Brighton. In 1846 the two main route owners merged to form the London to Brighton and South Coast Railway (LB&SCR).

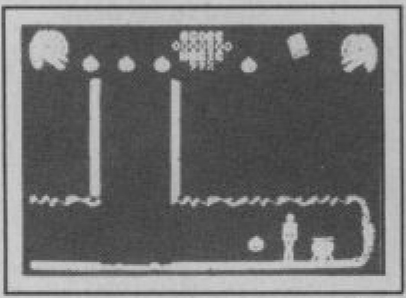
In 1875 "Pullman" luxury coaches were introduced by the company on a non-stop London to Brighton train called the "Southern Belle". It first ran in 1908 and continued until 1972 (running under the name "Brighton Belle" from 1934).

In 1923 the many railway companies of Britain were grouped together into four large ones, the LB & SCR becoming part of the Southern Railway. In 1926 the Southern Railway gave the job of pulling the "Southern Belle" to its powerful and imposing "King Arthur" class locomotives. These continued until the line was electrified in December 1932.

● CAULDRON II

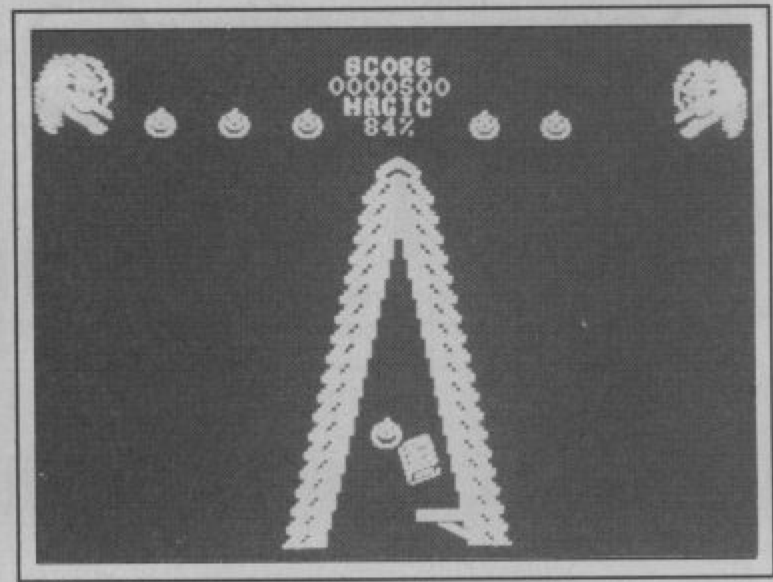
COMMODORE 64/128
PALACE SOFTWARE

Price: £8.99/cass



The witches cauldron — place your spell ingredients here — but watch out for that skeleton.

What sadists Palace Software are. After destroying half my braincells with the original Cauldron (probably the toughest game of '85), they're back to finish the job with Cauldron II — The Pumpkin Strikes Back.



Something useful in the steeple at the top of the witches castle.

Cauldron achieved critical acclaim because it had an excellent mix of Defender-style shoot 'em up and Willy-style platforms — quite an achievement in those dark days. Both the exquisite graphics and the wonderfully atmospheric soundtrack have been matched, as have the wicked puzzles and the mind-numbing difficulty.

The original prize was the Golden Broomstick — the most powerful in the whole world. But instead of using its powers for the good, the witch used it to destroy all pumpkins (you know how witches are). In true hero fashion, one pumpkin survived and now it's up to him to restore true pumpkin-kind and rid the land of the tyrannous hag.

Not so easy, though, because the witch has built a massive castle and filled it with nasties that are all out to get you — naturally. The castle has 28 locations all oozing with Dirty Dens craving for your pumpkin juice.

The object is to find the witch's bedroom, snip a lock of her hair and take it down to the bowels of the castle to concoct the spell. You'll need six objects to help you and these can be found in the hazardous bastions around the castle.

Also lying around the castle are sparkly things which replenish your energy and enable you to fire fireballs of magic which destroy most adversaries.

Sadly, I felt a little disappointed after playing the game for only a short period. The first Cauldron broke new ground and was original and challenging. Cauldron II is just a copy of Jet Set Willy. Judging by Palace's previous releases there's obviously talent there, and it would have been good to see a more original game from them.

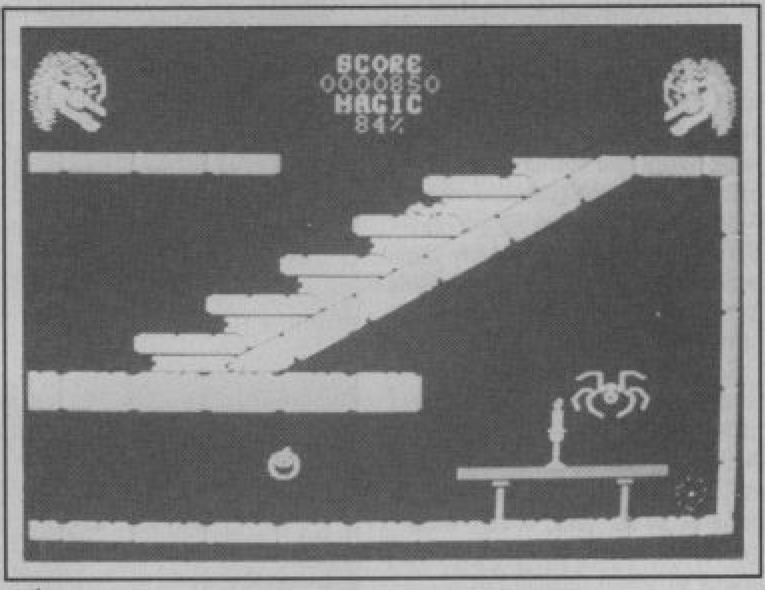
Also, I fail to understand why Palace have made the pumpkin bounce. It makes the game very unplayable and unpredictable. In a game of this difficulty, the ability to move accurately is required and that cannot be achieved with bouncing. I reckon even the most experienced players will find this hard to master.

Despite all that, Cauldron comes across as an extremely well polished and presented game. The title music is very spooky and the graphics are wonderfully detailed throughout the game. Animation is also good, especially the gargoyles and simply brilliant ghosts.

Nevertheless, I was less than keen to complete the game, probably because it's beyond the bounds of human capability. Those of you who are short of readies and want a game that lasts, this is the one. Otherwise, you'll need to be a total masochist.

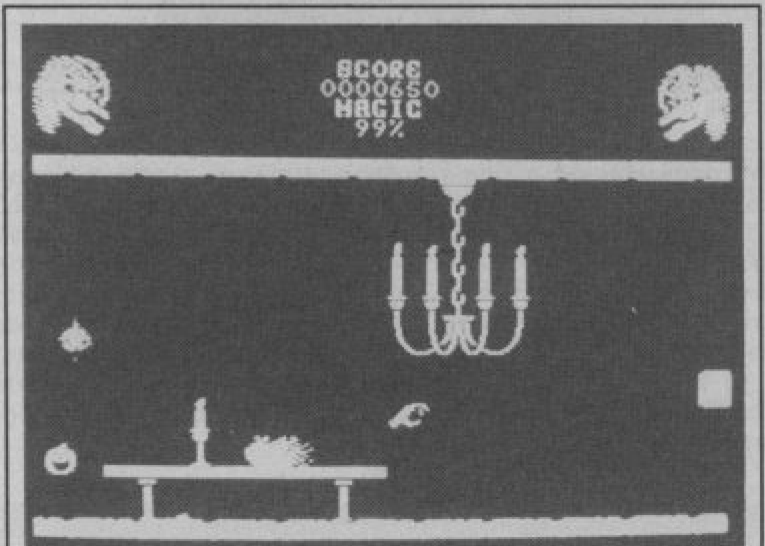
This game is bound to cause a stir in the industry but it won't rock the boat half as much as Cauldron I did. Neither will it be remembered with as much affection.

Colm Clarke



The bouncing pumpkin had better bounce clear of the spiders — they're deadly.

Animation and graphics are both excellent in Cauldron II.



Graphics	1 2 3 4 5 6 7 8 9 10
Sound	1 2 3 4 5 6 7 8 9 10
Toughness	1 2 3 4 5 6 7 8 9 10
Endurance	1 2 3 4 5 6 7 8 9 10
Value	1 2 3 4 5 6 7 8 9 10

7 Overall


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GOLF CONSTRUCTION

COMMODORE 64/128
ARIOLASOFT
Price: £12.95/cass £14.95/disk

I feel a bit silly sitting here in these check trousers, sun visor and white shoes — the spikes are making a hole in the carpet. But you've got to dress up for Golf Construction Set — it's so real, you'll want a caddy to carry your joystick between holes.

There's two parts to this program: you can either play on one of four top British courses, or you can design an 18-hole course of your own. So let's get down to the first tee — don't forget the brolly.

You can play at Wentworth, The Belfry, Royal St Georges and Sunningdale, and all four courses are authentically designed. The only thing you can't do is go for a post-match snifter with the colonel.

When you've set up course conditions (wind, temperature, ground condition), you need only a joystick to play. All players (up to four of you) start with a handicap of 28, just like the real thing. You get a full set of clubs and must choose three to leave behind. Don't ask me why — probably so the caddy won't get backache. After all it's the last club which broke the caddy's back.

Better loosen up and get some practice in before you start — in practise mode your handicap's not affected and you can try some tricky shots like lofts and fades. In matchplay mode, every shot counts.

Each hole gives you details of distance, par and degree of difficulty. Before playing each shot, you must set up five parameters. First, choose your club — Sevvy reckons I should go for the 3 wood. Take aim by moving a crosshair target on the fairway plan on the right of the screen. Then position your feet, clubhead angle, and finally, the strength of the shot. Thwack.

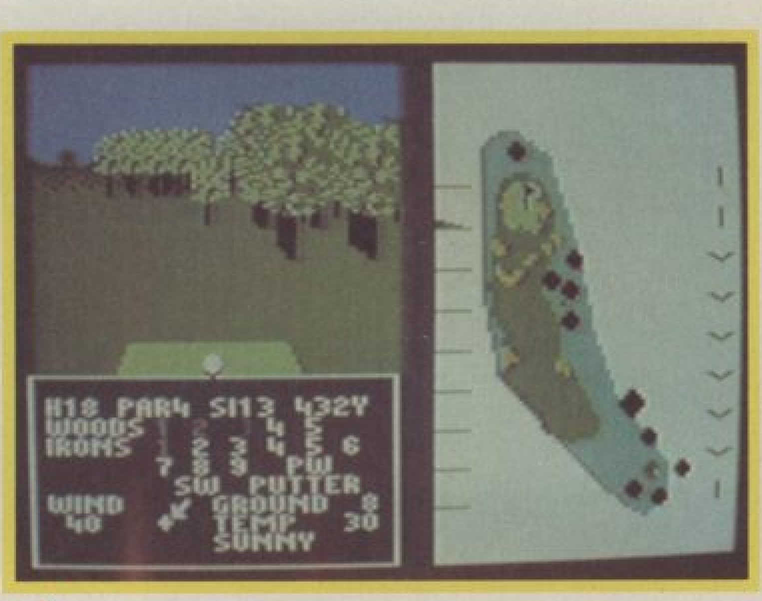
All being well, you're half way up the fairway — or you could be in the rough, in the trees, in a bunker or in the water. You certainly won't be on the green, not with a 28 handicap you won't. But beginners are more likely to play duff shots, especially if you choose difficult clubs.

So you thwack along until you get to the green. At each position on the fairway, you get a 3-D picture (top left of screen), looking from the ball towards the green. This function is pretty neat because it accurately depicts the scenery on the part of the fairway you're on. So if you're in the trees you'll know it.

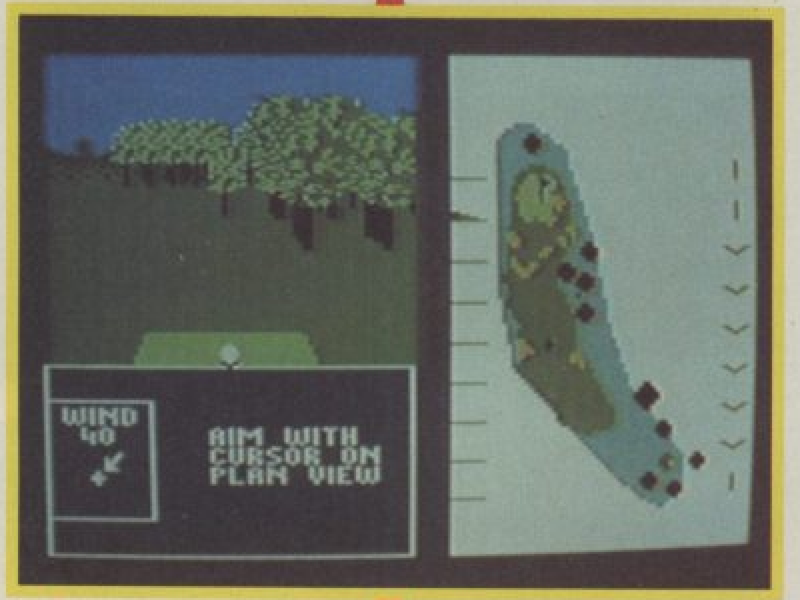
On the green, a putter is automatically chosen for you (you get a sand wedge for bunker shots). You line up the shot with the crosshair target again. Be careful here: check the green for slopes and gradients — or you'll end up missing a sitter.

And that's how it's done — 17 more holes to play to try and get your handicap down. At the end of a round, you can save your score on tape or disk and load it up next time to improve your handicap. By the way Ariolasoft has a competition running on this — get down to zero and you have the chance of winning £500 worth of golf equipment.

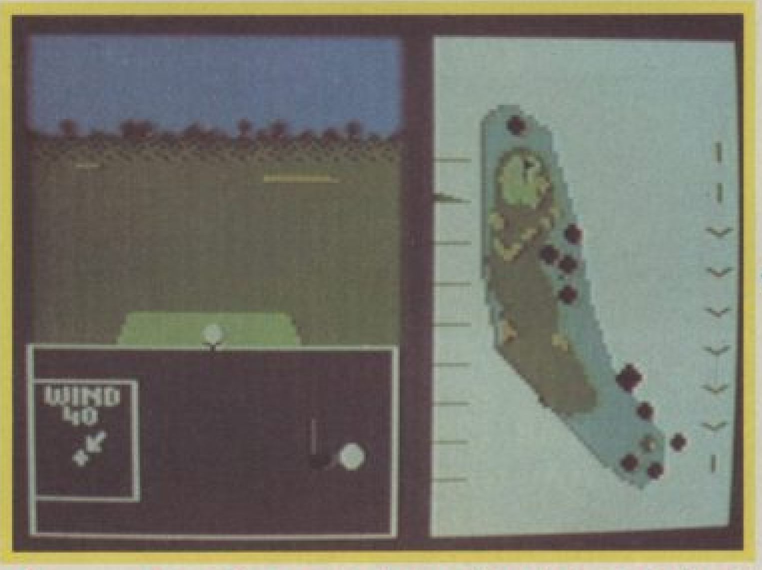
Golf Construction Set is simply a brilliant and almost obsessively authentic simulation of the real thing: accurate course design, accurate gameplay and a weighting system — that favours low handicaps. It's not only very easy to control, it gives



Step One: choose your club — use a wood because you're teeing off.



Step Two: aim your drive direction on the fairway map (right).



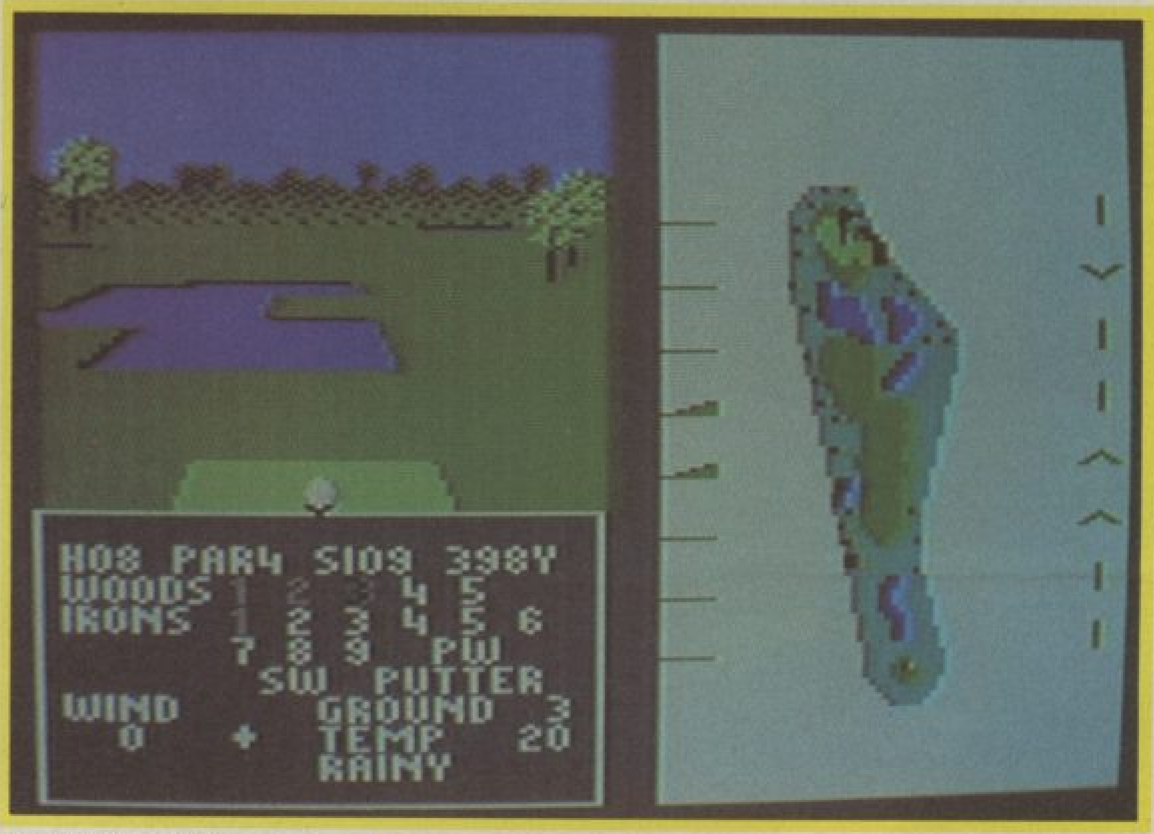
Step Three: set the angle of the club head.

N SET

you a huge range of options, even down to controlling the weather — even Jack Nicklaus can't do that.

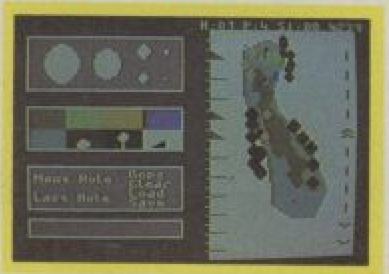
Graphically, it manages to give you all the information you need without making the screen impossibly cluttered. And the 3-D close-ups are positively brilliant. Just watch the ball speeding away from your shot and landing, with a couple of little bounces, right next to the pin — a joy to behold.

Bohdan Buciak



Eighth hole at Wentworth and you've got a tricky tee shot across the lake.

Design your own golf course using the 'components' on the left.



Build your own Golfcourse.

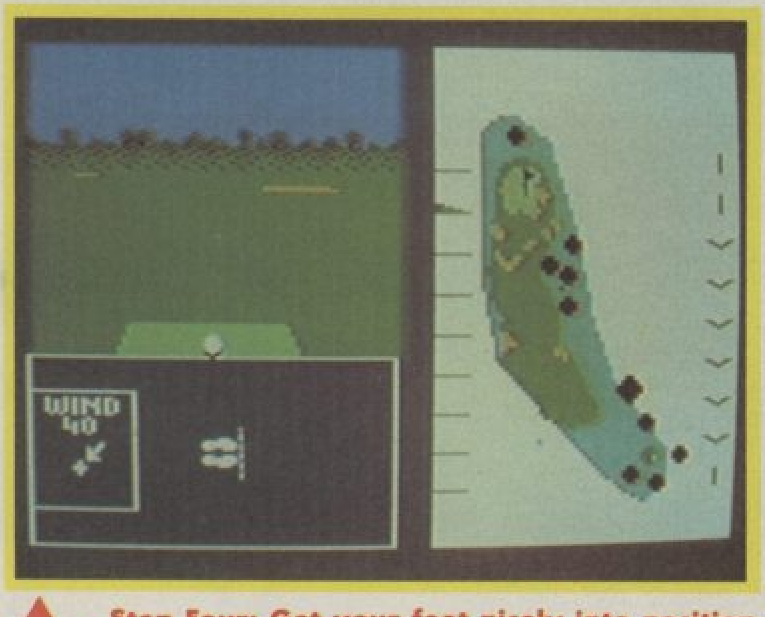
Although four top golf courses are provided (with more to come) the program lets you design your own 18-hole course and save it to disk or tape — so The Belfry's not difficult enough for you?

The idea is that you could draw your local golf course and get some sneak practise in. It's possible too, because Construction Set lets you design just about every facet of a hole: tee-off and green position, bunkers, trees and water, and even slopes and gradients.

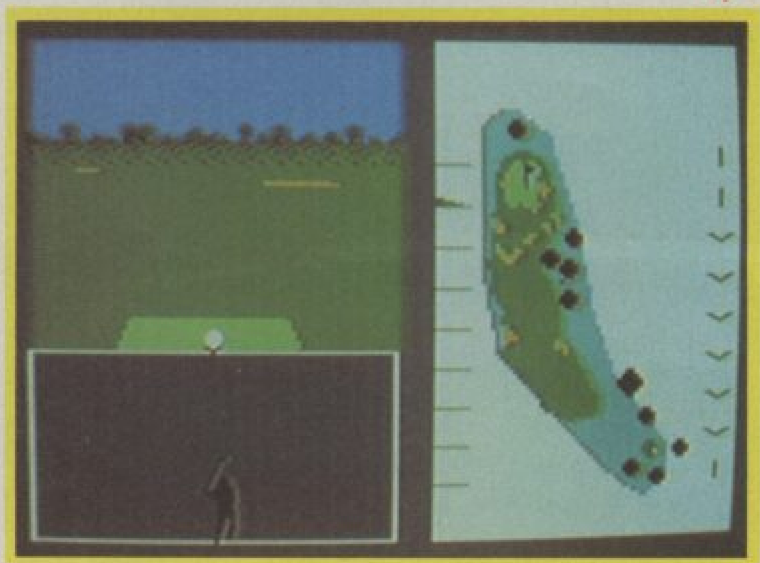
It's all joystick controlled too, rather like using a graphics program. Just choose from the set of options on the left and let your imagination run wild. Why not surround the green with trees and shrubs, or have it totally surrounded with water? Better still, when you eventually get to play the hole, you'll see all those features on the close-up 3-D screen.

Facts for Armchair Golfers

- The longest ever hole-in-one came from a 447 yard tee-shot by a certain Robert Mitera of Nebraska USA in 1957 — he was playing at the Miracle Hills Golf Club.
- Harry Lee Bonner, another American, gets the record for scoring the most number of holes-in-one in his career. He hit an incredible 57.
- Michael Hoke Austin is said to have hit the longest drive in Nevada in 1974. It was 515 yards.
- Most unsuccessful putter award goes to A J Lewis playing in Sussex in 1890. He took 156 putts on one green and still didn't make the hole.
- An Australian, Rick Baker, clocked up the fastest round of golf in 1981 when he finished inside 27 minutes — but he was hitting the ball while it was still moving.

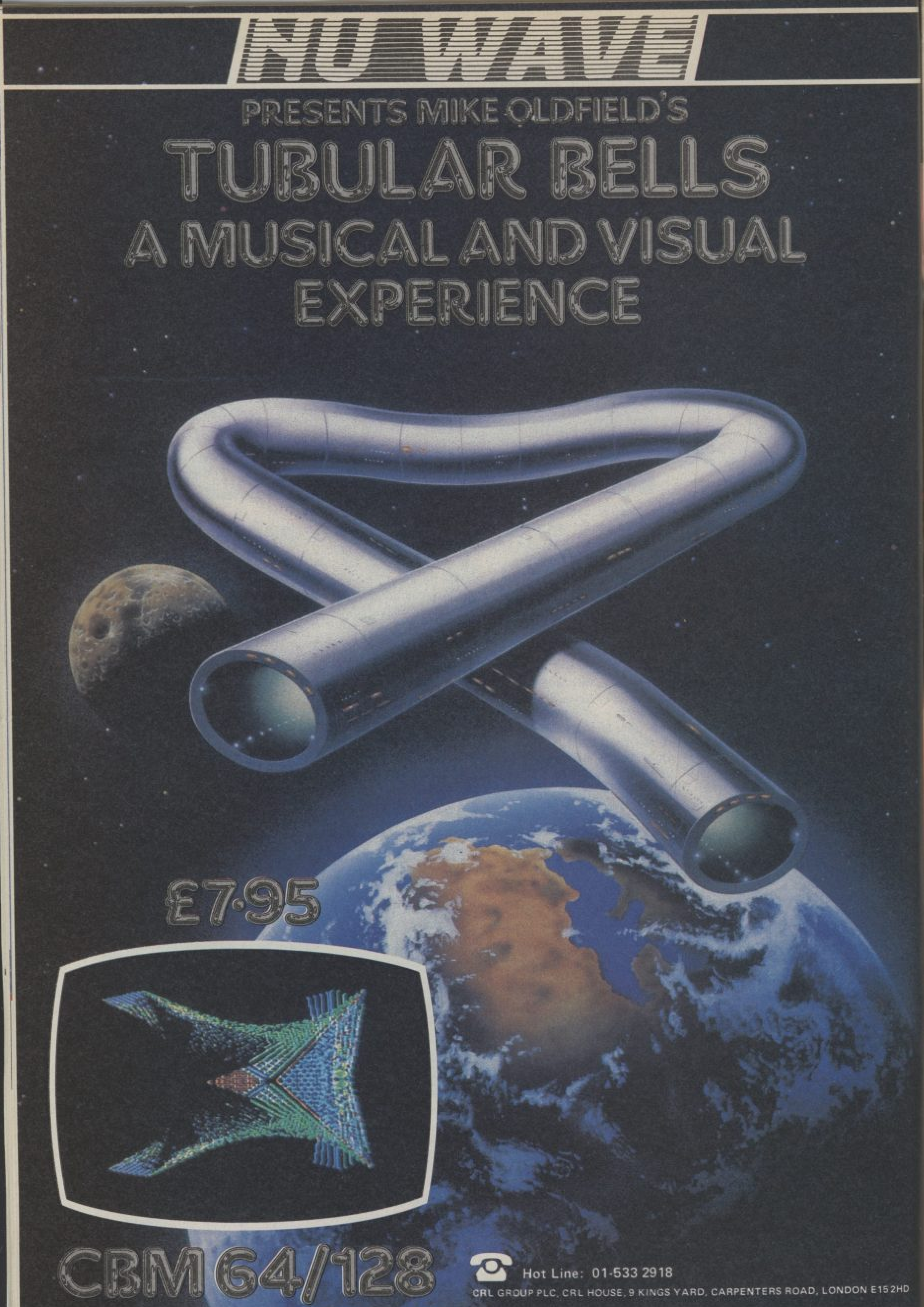


Step Four: Get your feet nicely into position.

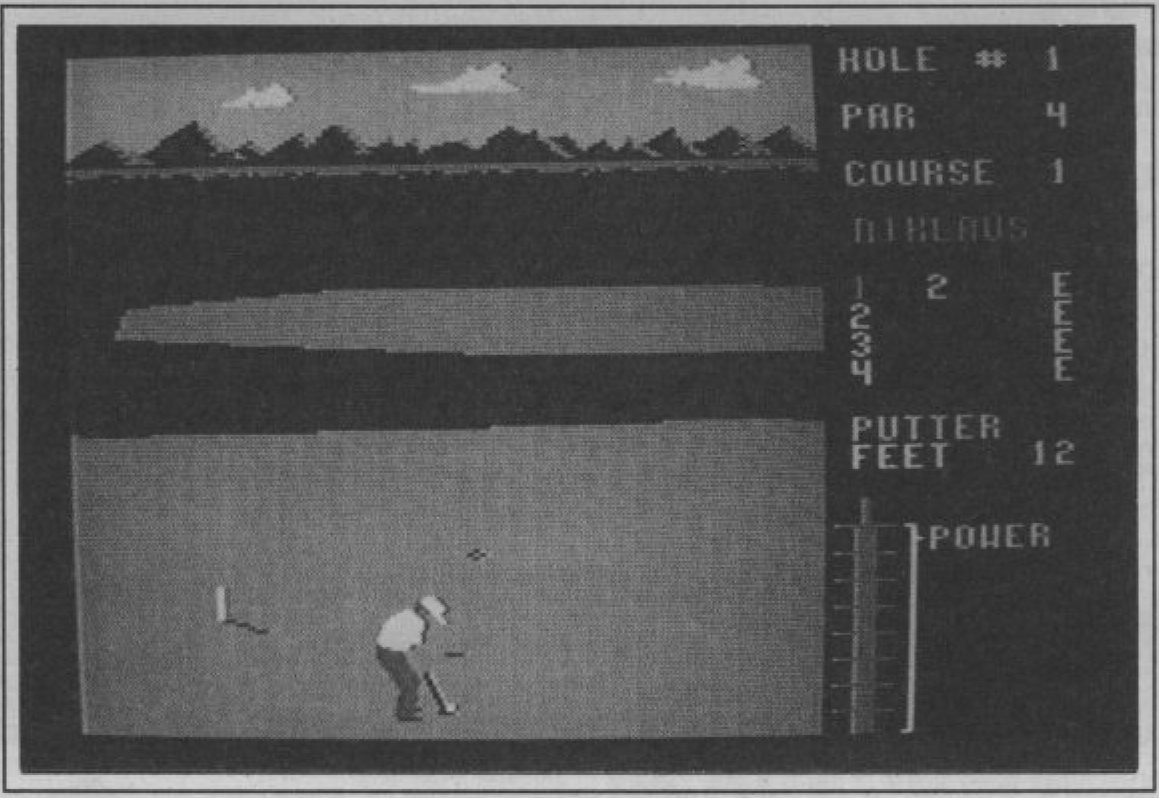


Step Five: and thwack. Strength of shot depends on how far you let the backswing go.

Graphics	9
Sound	2
Toughness	8
Endurance	8
Value	7
Overall	8



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◀ Niklaus lines up for a birdie three. But has he taken the downward slope into account?

•LEADER BOARD•

COMMODORE 64/128
Access/ US Gold
Price: £9.95/cass £14.99/disk

It's a pity I played *Golf Construction Set* before polishing up my clubs for *Leader Board*. It's like playing pitch and putt after the US Masters. Still, *Leader Board* has lots to commend it and even scores over GCS in a few areas.

Unlike *GCS, Leader Board* is purely a golf simulation — you can't design your own course. There's a choice of four courses (none of them real) which look so alike, it's a wonder why Access bothered to give you a choice. More about those later.

Starting options include 1 to 4 players and choice of 'novice', 'amateur' or 'pro' levels. These are important because they determine what happens to your shots. As a novice, you're not affected by the wind, hooked or sliced shots. In 'pro' mode, they whole lot gets thrown at you — better get the swear-box ready.

Like GCS you get a full set of clubs and you choose one for each shot (funnily enough, you don't get a sandwich, sorry, sandwedge). Unlike GCS, a player actually appears on screen who swings and thwacks his way up the course — mine looked like Arnold Palmer with lumbago.

The process of hitting shots is fairly simple. When you've set the direction of shot, you set its strength on a power meter by pressing and letting your fire-button go. That also determines whether the ball will hook or slice. There's also a power meter for the putting green.

It's all a bit confusing at first but is mastered fairly quickly, especially since there's a driving-range option for practising on. It also lets you experiment with different clubs and the distance you can gain with them. Be warned, though, you'll need a joystick with a pretty sensitive button. That's it really, apart from the wind indicator and the slope marker for the greens.

In terms of realism, *Leader Board* scores well on shots. Club distances are accurate and so are the effects of wind, gradients and hooks and slices. When you've mastered those two, you can sit back and watch as your tee-shot curves majestically towards the green.

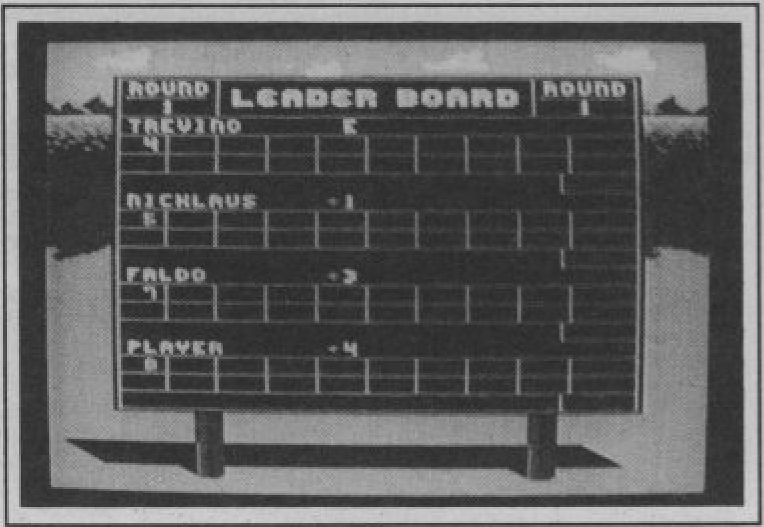
Sound effects (ball plopping down the hole, ball hitting the pin) are adequate. Scoring is very good too — a complete scoreboard appears after every hole so you know exactly how you and your partners are getting on.

Leader Board doesn't fare so well on graphics. The courses look mostly like green islands surrounded by sea; there are no bunkers, no trees, no rough. Maybe all American courses are like this? Maybe the programmers just don't like trees?

The only real hazard is wacking your shot into the water — that happens quite regularly in 'pro' mode. "Occasionally you will find other small hazards that do not appear to be grass", says the manual. I never found any, though. Could they be the type you wouldn't like to tread in?

To sum up, *Leader Board* just doesn't have the attention to detail and shot control of *Golf Construction Set*. If you're an armchair 'Pro-Celebrity Golf' watcher, *Leader Board* will probably satisfy you. But for the tartan trouser brigade, it's got to be Golf Construction Set.

Bohdan Buciak



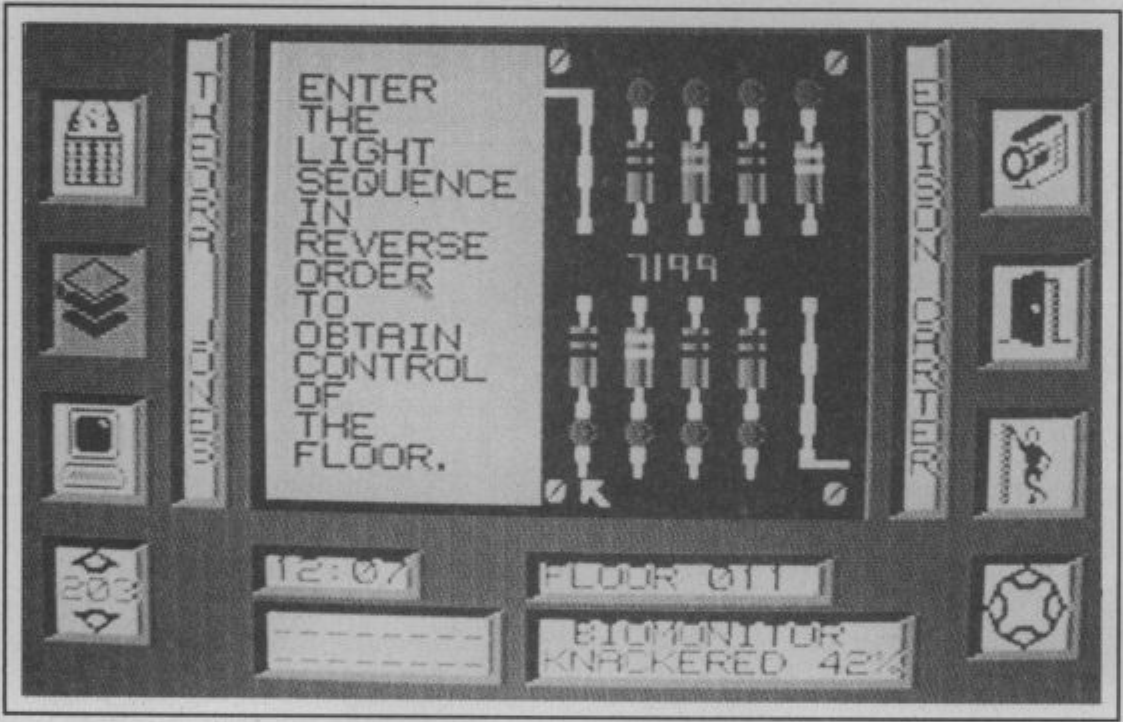
◀ Leader Board's impressive score board.



▲ Excellent animation of golfer's swing.

Graphics	7
Sound	3
Toughness	6
Endurance	5
Value	6

6 Overall



Nice graphics and tricky puzzles in Max's game.

●MAX HEADROOM●

COMMODORE 64/128
ARGUS
Price: £9.95/cass

From his beginnings in a short movie of the same name, Max Headroom's rise has been meteoric. There's been a book, his own music show, adverts and interviews. After a while everybody knew Max was a real bloke dressed up like a dummy (sorry Max). No wonder the guy's got such an obnoxious ego — too much too soon. The final straw is the game itself.

Max Headrom is one of those games which tries to be revolutionary, original and addictive. The end result is a product which is a hotchpotch of ideas backed up by inadequate instructions.

The game takes its plot from the film. You play cameraman Edison Carter given the task of finding the Max personality module in a TV station within six hours. Since the film itself was hardly revolutionary — ripping off its best ideas from the brilliant American Flagg series from First Comics — the game itself lumbers along in a similar vein. Icon design, lifts, puzzles — shades of several popular games here.

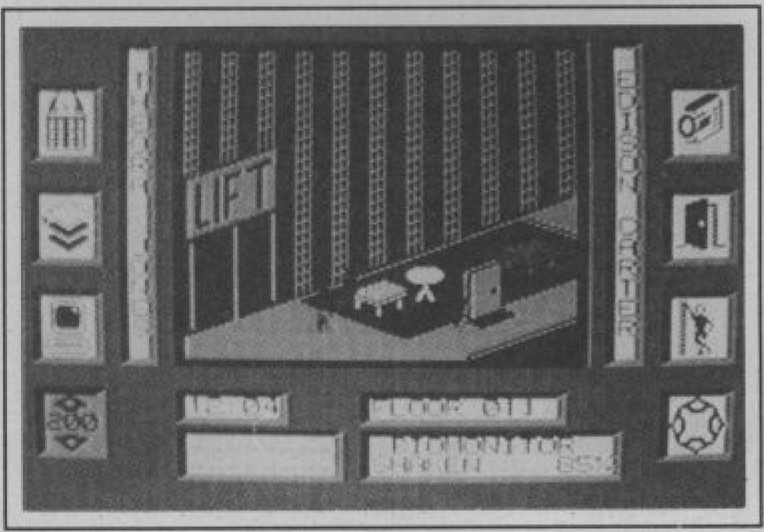
Screen one sets you a little puzzle just for starters, one that I haven't yet fully understood. Get it wrong, as you invariably will, and the lift goes out of control and dumps you at random somewhere up the top. After a while this simply becomes an irritant.

Once you make it onto a floor, you're going to have to call into play your icons:

Lift: Calls lift.
Floor: Gives access to the floor computer. Some of the codes are provided for you in the instructions. Those for the president's floor and the lab are vital.
Info: This displays the location of any other human presence in the building.
Scan: Allows you to check for robot guards using securicams.
Exit: Allows you to leave any room.
Rest: Allows you to recover your energy — shown as a percentage.

Once you step out the lift you appear as a little matchman armed with what looks like a box brownie, but is undoutedly your camera. Moments after you make your entrance you will be beset by several similarly drawn figures who are guards. If you're not sure what the hell to do, another icon gives you the opportunity to view several different camera angles of the floor.

Moving from floor to floor is tricky because each time you want to go somewhere you have to crack the blasted lift code. You have to reverse four notes played by the computer to select a floor in the skyscraper. It's easy to make a careless error. It's well worth reading the memos printed in the instructions for further clues into the game as well.

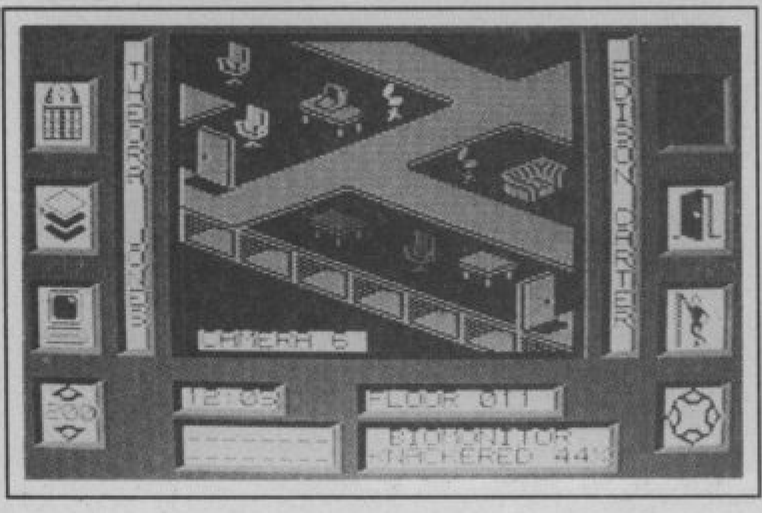


Max heads for the lift.

Max Headroom, the film, gave Quicksilva a lot of scope to create an original game. Sadly they chose to ignore the possibilities raised by the plot. I was reminded of CRL's failure to make something of a similar cult film, Bladerunner. Both the films thrive on their futuristic atmosphere — neither of the games capitalise on it. Eventually I found the finickyness of the game a deterrant and began to lose interest rapidly. A wasted opportunity.

Ferdy Hamilton

Maze-like layout of just one floor of the Radio station building.



Graphics	6
Sound	7
Toughness	9
Endurance	3
Value	3

3 Overall

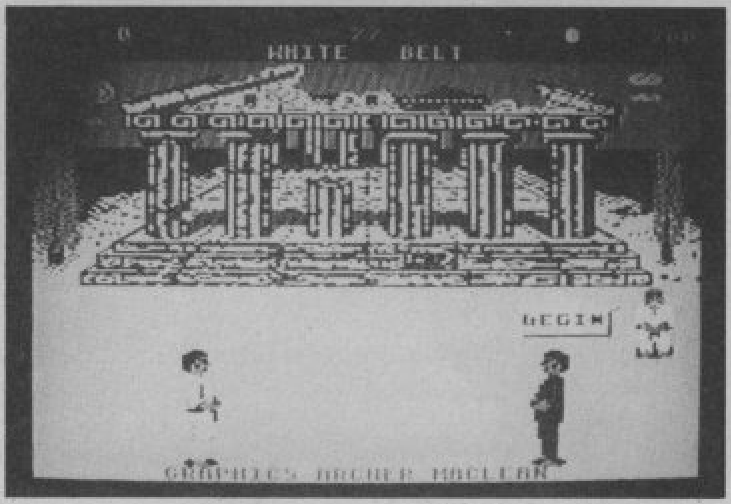
INTERNATIONAL KARATE

COMMODORE 64/128
SYSTEM 3
Price: £6.50/cass

If two games were ever alike it's *Way of the Exploding Fist* and this. The games are almost identical. But is *International Karate* better than its predecessor? Like *Fist* the game is played in front of various backdrops. The moves are all basically the same i.e. roundhouse, flying kick, lunge punch etc.

Scoring is done in points; half point for a normal move, full point for a well-executed move. First player to two wins the round. Three consecutive rounds moves you up a belt and onto a new, slightly more advanced opponent. You get one life so you can't afford to lose a round.

In between opponents there are several types of bonus sections. For example you get to headbutt a stack of rooftiles or evade flying objects, the latter being the harder option. A nice touch is when you've won a round your man flicks the sweat of his forehead. The speed this game plays at you might well find yourself doing the same thing.



Sight seeing in Athens is a lot more fun when you have a scrap outside the Parthenon.

This is the difference between the two games. *International Karate* is much faster than Melbourne House's game. It plays at near Atari speed. Sound is also superior, mainly thanks to one of those Rob Hubbard icing-on-the-cake soundtracks. It sounds like something Ryuichi Sakamoto might put together. The music gets quicker as you progress through the levels. There's some nice thudding sound effects in there as well to make you wince.

The backdrops are all excellent, the first one being a great drawing of the sphinx. The animation is excellent.

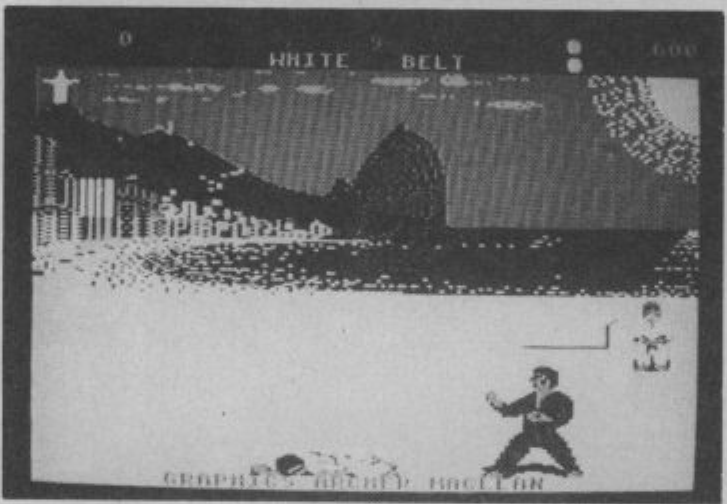
International Karate is a polished up version of *Fist* and is, dare I say it better on all counts. All except one. Originality. If System 3 had got their act together and put the game out when oriental fighting games were in then they'd have got away with it.

It is however, little more than a copy, a copy though that sells for a steal, so if you don't have *Fist* and feel tempted, go for it.

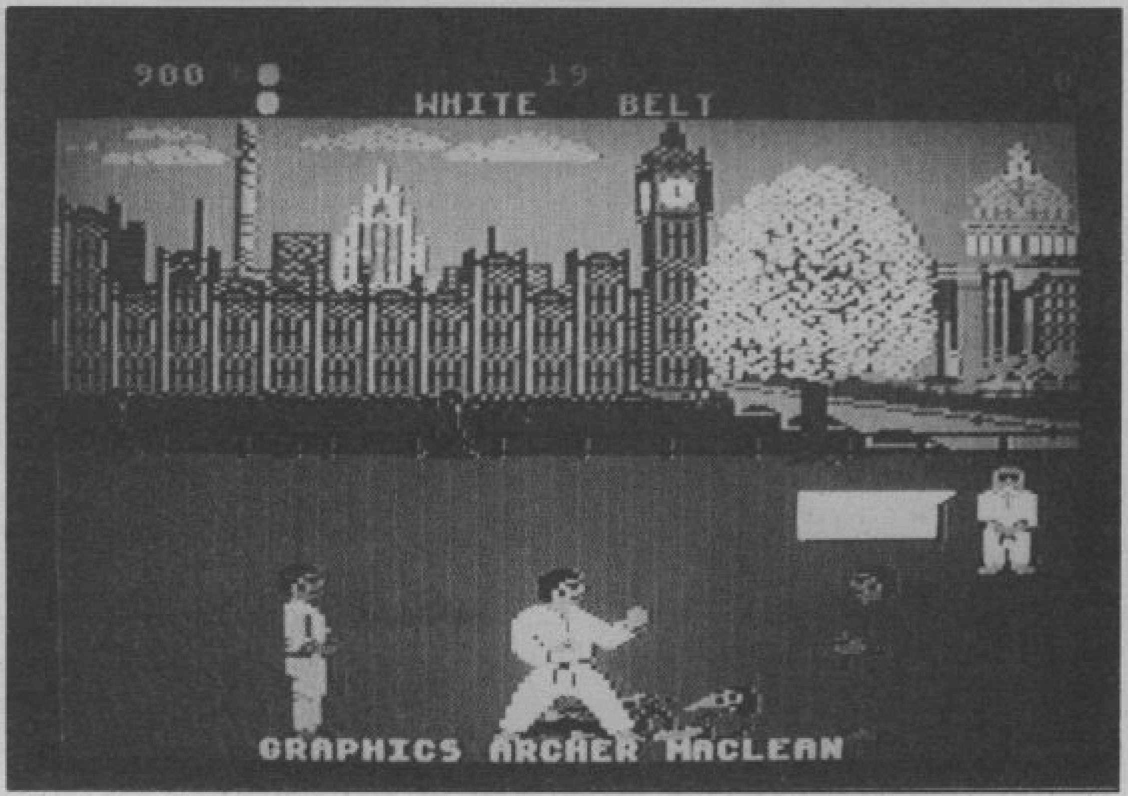
Ferdy Hamilton

Graphics	1	2	3	4	5	6	7	8	9	10
Sound	1	2	3	4	5	6	7	8	9	10
Toughness	1	2	3	4	5	6	7	8	9	10
Endurance	1	2	3	4	5	6	7	8	9	10
Value	1	2	3	4	5	6	7	8	9	10

8 Overall



Fighting on the beach in Rio — I ask you, what's wrong with Pina Colada's and Jackie Collins novels.



Fists fly on the South Bank as Big Ben tells you it is four o'clock.



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Commodore User Oct 1985

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Best regards,

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*Major Bill Stealey, U.S.A.F. Reserve, President of MicroProse.

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"Sid Meier and his team of simulation experts at MicroProse have outdone themselves with SILENT SERVICE, a re-creation of submarine operations in the Pacific during World War II. As a U.S. fleet submarine skipper, you can almost smell diesel oil and feel the deck rolling beneath your feet while searching the western Pacific for Japanese shipping." *Antic*

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Tighten down your safety harness...kick the tyres and light the fires! You are in for the thrill of a lifetime in ACROJET, your own personal jet! ACROJET simulates the BD5-J, a one-man, 200 mile an hour plus, jet aircraft that is fully acrobatic and everything a real pilot could want or handle!

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allow those pilots who have soloed in SOLO FLIGHT to experience the thrill of jet acrobatic flying!

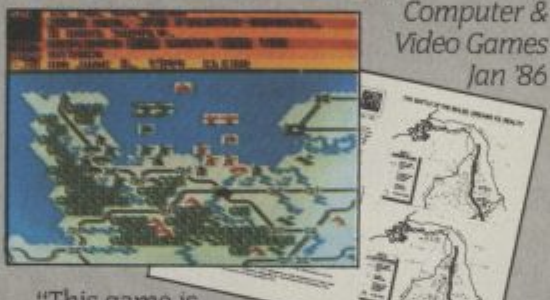


CRUSADE IN EUROPE

FROM D-DAY TO THE BATTLE OF THE BULGE!



"This game is a good buy, well presented, thoroughly researched and enjoyable to play." *Computer & Video Games Jan '86*



"This game is going to set a new standard with an outstanding combination of realism and playability."

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DECISION IN THE DESERT	●	●	●	●	Cassette £14.95	Disk £19.95
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MICRO PROSE

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Preview

NEXUS

Preview

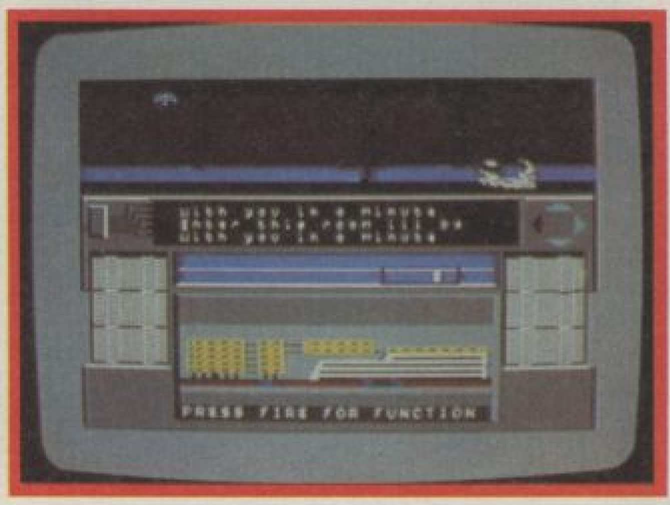
What ever happened to *Nexus*? Do you remember CU published a review of it last summer and then the game myteriously failed to turn up in the shops.

This was due to Beyond being taken over by British Telecom. Programmers Paul Voysey and Tayo Olowu decided that they didn't want to work for Buzby and set up their own company. Beyond bosses Bill Delaney and Clive Bailey decided to go with them and a new software company was born and they called it Nexus.

In case you are wondering why I am giving you all this history of the firm stuff it is for a good reason — the year in between leaving Beyond and the launch of Nexus has been used to totally re-work the game — adding in lots of different and original features.

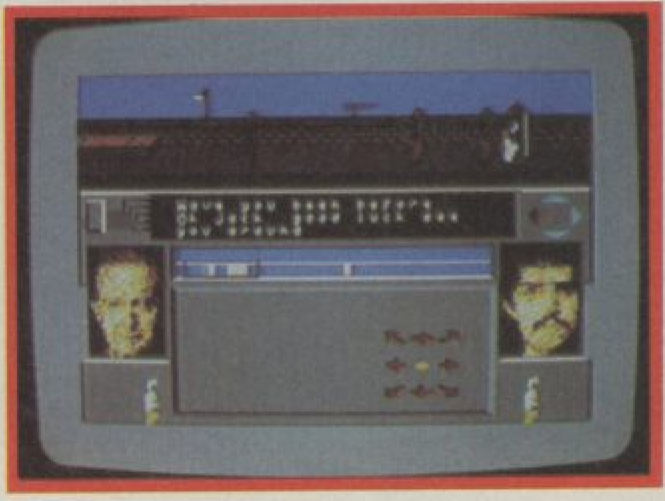


▲ **Note the interesting list of weapons on menu.**



◀ **Centre screen shows your position on map of the Nexus complex.**

▶ **Digitised faces to the left and right of screen enable you to identify enemies and friends.**



Unfortunately we cannot bring you a full review of the game because it is not yet completely finished but it is certainly near enough to give you a detailed preview and some early impressions.

You are an ace reporter sent to Columbia by your newspaper to investigate the disappearance of your friend and to look into the dealings of a shadowy organisation involved in the drugs racket. You suspect that your friend is being held by the organisation in the Nexus building where the action takes place.

You have two main objectives. One, to locate your friend and release him, and two to collect the 128 pieces of information scattered throughout the complex. Piece this information together into a recognisable sentence and transmit it successfully back to your editor. If you don't fancy that you can just concentrate on causing as much mayhem as possible in the Nexus complex — disrupting the work of the drugs barons.

The Nexus complex is very heavily defended with guards and several security devices.

If you want to get the best story for your newspaper there are no less than 32 questions that you will have to find answers to. What is the name of the chief scientist involved? Where are the drugs produced? How do they get into the U.S.A.? Time and date of next shipment. The answers take the part of a sentence, divided into four parts — and remember there are 128 parts altogether.

You make sense of these bits of sentences on one of the editing terminals and then transmit the sentences back to the *Daily Clarion* from the Transmission Room.

One of the most interesting things that you will first notice about Nexus is the faces that appear in the windows every time a character appears in the main play screen.

These digitised faces are not just frills. They enable you to recognise your friends in the Nexus complex — the good guys who are working from within to try and crack the drugs ring. These people will help you in your task and it is therefore essential that you make contact with them as soon as possible.

You have a number of abilities — you can run, jump, roll, punch and do a Kung-fu style flying kick. There are also weapons that you can select off a menu that is called up in the central information screen using your joystick. A machine gun, knife, and stun bomb are listed for possible use.

You can really let rip with the machine gun. It's fun but not exactly a smart tactic really, this wasn't designed to be a *Commando* clone. The effect of shooting things up like some demented Rambo is merely to attract attention to yourself. All of the actions currently available to you are presented in the information panel. More options are called up via your joystick.

Graphics and sound are impressive — especially the title music. Nexus is also one of those arcade adventures that shows you with a tiny cursor, and mini map, exactly where you are at any given time — an essential feature in this type of game.

There's one hell of a lot in Nexus. It is a hybrid. It has arcade action, codes to be cracked, a large complex to find your way around, and intelligent enemies.

The depth and quality of the characterisation is stronger than in any game I've seen since *Shadowfire*. We think it's going to be good.

NEXUS COMPETITION

Ever wanted to be a super-sleuth reporter? An international correspondent flying all over the world to the hottest trouble spots, or a crime reporter monitoring the big deals in the underworld? Well now you can thanks to Nexus and CU's latest competition idea. We are giving away everything you will need to file a first class scoop to your favourite magazine — CU.

Yes, when we have kitted you out properly we are going to send you on an assignment.

We can't promise it will be quite as exciting as the Falklands or Libya but it will be a lot more fun, a good deal safer, and it will concern your favourite subject — playing games on your Commodore.

This is no Mickey Mouse assignment either. This is the real thing — and we expect to publish your report in the following issue. Just to make sure you come back with the goods the Editor will be with you to lend a hand when the questioning gets tough.

Here is what you will take with you on your assignment should you be chosen as our lucky winner. Nexus Software are giving away a disk camera complete with film, neat and discreet and just right for an ace reporter, a trendy Fleet Street style brief case, a walkman for playing back those interview tapes, a phone card, essential for the reporter on the move who has to phone in a story, a trusty reporter's note pad and shorthand pen, a Filo Fax because you will need to be organised and in the right place at the right time.

Let's face it — even if you don't become the next Max Hastings or even Mike Pattenden we reckon that all that gear is going to come in pretty useful anyway.

B	G	T	E	Q	A	T	F	B	D	C	P	T	D	F	G	Q
I	H	B	A	G	E	E	U	V	F	D	S	G	E	O	M	T
A	F	C	D	R	C	B	S	O	D	H	C	U	J	R	E	A
T	S	Z	K	B	R	W	C	X	Y	K	L	I	F	J	H	R
H	N	U	C	F	P	V	U	T	F	V	G	W	S	E	K	P
Y	M	I	K	X	I	O	I	G	A	H	H	N	V	W	I	V
O	X	O	N	J	N	T	P	W	I	W	J	K	E	Q	K	Z
A	C	T	I	O	N	P	D	J	K	R	M	Y	S	X	L	X
N	P	L	Q	E	B	Q	L	M	X	E	L	X	A	N	U	O
O	A	J	D	R	S	H	Y	M	D	C	O	D	E	Y	B	S
Z	Q	I	M	R	Z	T	U	I	L	V	W	U	F	C	G	Y

Now look at the word grid above, there's a five-word message contained in it. What does it say?

Win an ace reporter's kit



How To Win

If you are going to crack the drugs ring operating in the Nexus complex you will need to become pretty good at cracking codes.

Guess what? You are going to have to crack some more if you want to get your hands on that prize as well.

There are two garbled sentences printed below, each has a different way of being cracked. Tell us what they say:

1 Xzm blf ivzw gsrh? Blf xzm? Sffib! Gvoo Xlnnlwi Fhvi glwzb yb klhg.

2 .tsop yB. yadot resU erodommoC llet !yrruH ?nac uoY ?siht daer uoy naC

All entries must be received by 15th June 1986. Government agents, investigative reporters and employees of EMAP need not apply.

Sentence 1:..

Sentence 2:..

The Message:..

As a tie-breaker tell us what story you'd most like to go out and write for *Commodore User* and why you think it deserves covering:..

....

....

Name:..

Address:..

....

Complete the form and send it to Nexus Competition, *Commodore User*, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU.

✪ AMERICANA



AMERICANA

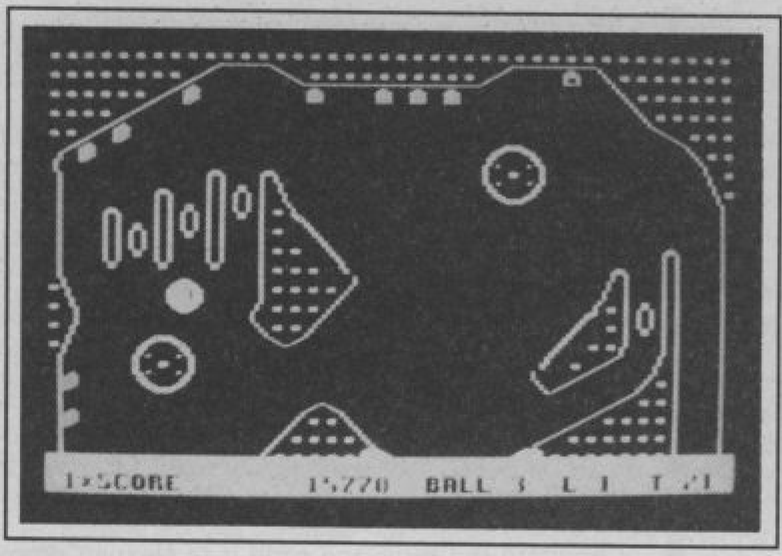
Having decided to throw a tantrum at the inclusion of Mastertronic's cheap games range in the charts, U.S. Gold have realised they are missing out on a few bucks, so they've launched their own range called Americana which sells at £2.99. We asked U.S. Gold's Tim Chaney if he'd be upset if the games were excluded from the charts if they became hits. An unrepentant Chaney shook his head: "We made our stand and we're sticking by it. These kind of games don't deserve chart recognition. So there you go, U.S. Gold have said their piece and are standing by it.

SLAMBALL

In Slamball you get a pinball simulation. Just that, nothing more exotic. Americana cheapos have plenty of instructions and bumph with them which suggest you're getting a lot. Well you're not here. Using the joystick you a fire a little smilie ball up the table and then control the flippers as the ball scrolls down the table.

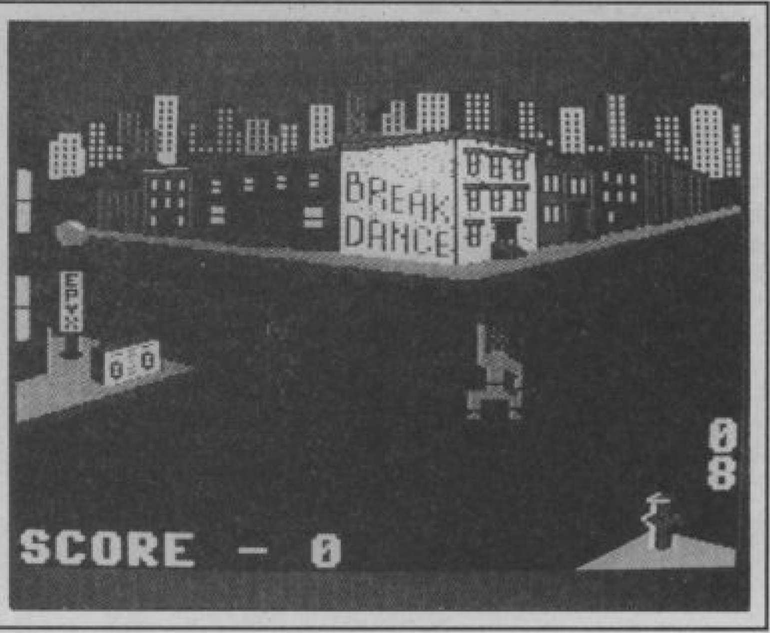
Your only other means of control is by pressing the fire button down you can simulate the kick you can get off a table by bumping. Just like the real thing though, too much roughness and the game tilts.

No pinball wizardry here — better stick to the real thing.



That's Slamball. I can't really see the point of such a game at any price. Nothing can replace the real thing. This is definitely something you stick to the arcades for.

Hot Foot's ghettoblaster batteries must be getting pretty low by now. Can you be bothered to imitate him?



BREAKDANCE

This was probably Epyx's worst ever game. Released on the breakdancing hip hop bandwagon last year it contained none of the classy graphics or stylish finish of any of their major hits.

The game took the form of a semi-puzzle dividing into three parts. In the first you had to mirror the movements of the local ace 'Hot Feet'. In the second you battle it out on the waterfront with a group of dancers who have just invaded your territory. Again it's a case of emulating their moves using the joystick. The inevitable failure results in you taking an early bath.

The third challenge was a Mastermind-style puzzle involving selecting a sequence of moves, each shown in a building window. The only part of Breakdance that bore any resemblance to a game which deserved such a title was the final challenge which was a sort of freestyle event which allowed you to put all the available moves together in a freestyle routine. I bet they used the same code for the ice dancing in Winter Games.

In short Breakdance was pretty weak stuff. It failed to live up to the promise of its title at the time and now looks somewhat dated. Not bad for three quid I suppose.

MOON SHUTTLE

This is one of those shoot 'em ups in the style of games like Moon Cresta.

The first screen presents you with the task of clearing an asteroid belt. Once this has been completed you are confronted with waves of nasties all getting progressively difficult, all deadly in their own way.

Bomb launchers are probably the easiest of your opponents. Staying in one position and timing your shots well will be enough to see them off.

The Expandos get larger and larger as they fire. They're a problem because there's so many of them to overcome.

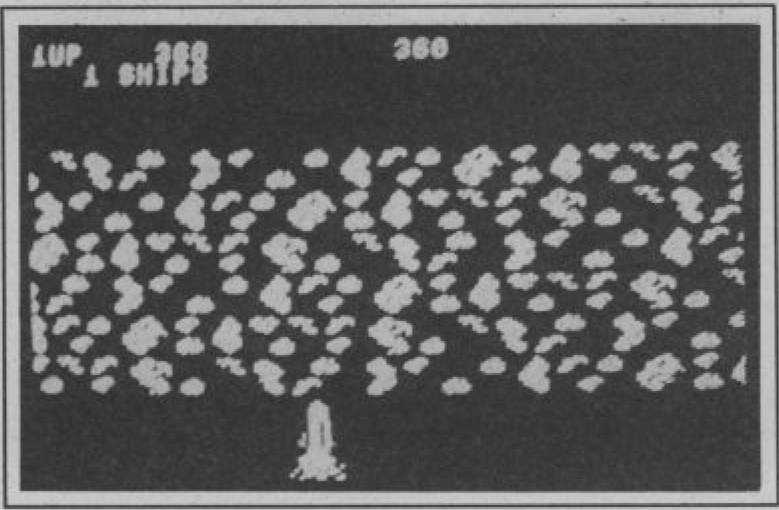
Man-o-wars present the most difficult challenge dodging and firing at random as they circle round the screen.

Other nasties you'll meet on your travels include the blob men and Combrade the prince of darkness who appears with the blob men. Asteroid showers which get faster also appear at intervals.

Moon shuttle is a pretty average game which holds no new elements or special challenges. Give it a swerve even at this price.

OLLIES FOLLIES

In Ollies Follies you are the daredevil Ollie who has to leap through



▲ **Moon Shuttle — not one of NASA's favourite games.**

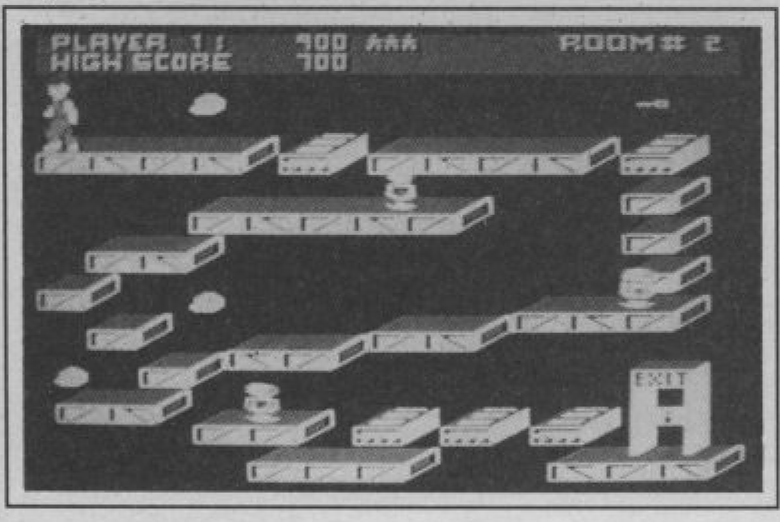
twenty-four screens of 3D platform action.

To escape from each screen you have to hop your way to the locked door making sure you first find the key and take it with you.

The platforms are populated by the usual bunch of nasties but there is a novel way of dealing with them which reminded me of the power pills in Pac Man. As well as the traditional method of hopping over the nasties you can also swallow an energiser which will make you invincible for five seconds. The energisers have one amusing side effect, though — they make your hair turn yellow.

When you get onto some of the later screens the action really hots up with moving platforms requiring the most precise hops.

Did platform games go out with platform shoes? Ollie must negotiate 24 screens to try and get into a better game. ▼



One of the nice things about this game are the codes that enable you to start where you left off each time you load a new game. (Sshh. Don't say I told you, but the words Frank and Fanda might come in useful.)

There are a couple of nasties that were so devious they deserve a mention — namely the electric fan that blows you off your feet and the spark-spitting oven that is quite an electrifying experience.

Graphics are cheerful with large sprites and bright colours. Sound is only average though with a nauseating tune and below average effects.

At £2.99 this is a must for die-hard platform nuts. Ordinary gamers may get a cheap thrill or two out of it as well.

NEW YORK CITY

Most of you have at one time or another had tourist troubles. If you haven't and would like to, then read on because that's the subject of this game.

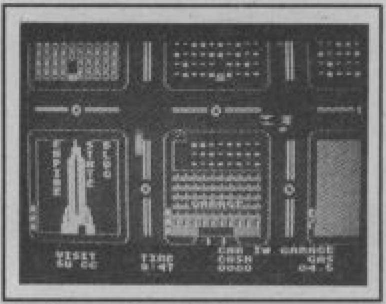
You play a tourist who has to visit twelve locations before time runs out.

The locations are the Empire State building, United Nations building, Grant's tomb, (*Lou? — Ed*), World Trade Centre, Citicorp Centre, City Hall, The Zoo, Post Office, Automat, Mart, Bank, Subway.

You start the game sitting in your car in a car park. The location you must next visit is displayed at the bottom of the screen. This will not be easy because although you have a map, New York is fairly large.

The 64 shows you a bird's eye view of your car chugging slowly along the streets of NYC, while crazy cabbies and fire trucks attempt to slam into you.

Should one of these hit you — and you'll need to be a pretty smart driver to avoid that eventuality — you will be sent straight to the city hospital while your car is given a check and gas refill.



▲ **Cue Sinatra: "I want to be a part of it New York, New York . . . ."**

Just as in real life garage bills will set you back a bob or two and things are no differnt in New York — which makes for quite a drain on the measly eight hundred dollars which you are given at the start of the game.

Money is quite a problem in this game as just about everything you do will cost you hard cash.

My main criticism of the game is what happens to you once actually inside a tourist attraction. A tedious platform game that fails dismally to entertain.

The aim here is to get to the top of the screen and wait for a platform to appear between the middle ladders so you can run across it and get the steering wheel-like object, get back down to the bottom again, all the time avoiding the two little men that will send you crashing back to the beginning again at the slightest touch.

Graphics and sound leave just a bit to be desired but all in all this is a most addictive and entertaining game and a scoop at £2.99

SENTINEL

Definitely one of the better releases on the Americana label, Sentinel was given favourable reviews when it appeared a year or so back at full price.

Sentinel took its lead from Atari's *Star Raiders* which was itself the precursor of *Elite*, and pretty good entertainment a few years back.

You control a starship from the command deck on its voyage through the galaxy. By using the ship's

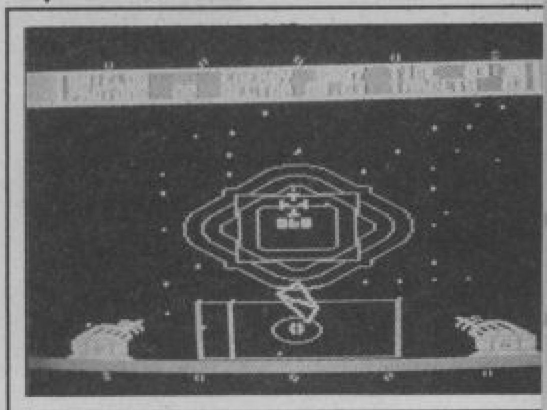
CHEAPO OF THE MONTH

instrumentation you can battle with enemy ships or different strengths, dock and refuel, and stop aliens from capturing earth.

The view is a straight ahead 3D one of space from the deck of your own ship. Two large guns jut out, and shift around realistically. You choose a zone to warp to by selecting a co-ordinate from a grid the ship's computer throws up on the screen. Different coloured ships displayed have different capabilities. For the heaviest you'll need your proton bolts.

To succeed you'll have to clear away all enemy ships and base stars,

▼ **Sentinel is a real bargain for three sovs.**



which is no easy task. The main problem is targeting, because the guns are conrolled in one of those down for up, up for down modes, which is a bit disorientating. You have a limited amount of shields as well and these can take a battering in asteroid showers as well.

Ferdy Hamilton

10 COMPUTER HITS 2

COMMODORE 64/128 BEAU JOLLY

Price: £8.99/cass



Looks like certain software houses are running out of new ideas, and have had to resort to compilations and arcade conversions. Beau Jolly have now released their third compilation in five months. On it you will find:–

Super Pipeline 2
You are a plumber who has to stop various nasties from damaging the network of pipes. A fun little game with good cartoon style graphics.

Mutant Monty
Get the treasure and rescue the damsel in distress is the challenge you accept when you take on the role of Mutant Monty, but don't be fooled the game is Y-A-W-N boring!

Henry's House
Prince Henry (no relation) sets out to discover the secret of the palace's eight rooms and has to collect various objects. The result: an average platform game.

Gribbly's Day Out
On the planet Blabgor, home of Gribbly Grobbly, all the little gribblets have done a bunk. Poor old Gribbly is lumbered with the job of finding them, which is not as easy as it sounds. What else can I say but bright and cheerful graphics, great game. By far the best of the ten.

Snooker
Another simulation in the Steve Davis mould. You can choose how much power or spin to put on your match-winning break (well my match winning – 147 – break) but all the same a bad simulation, with unrealistic movement.

Mama Llama
Hairy Jeff Minter's old favourite, but isn't it just too late?

Raskel
A defender style shoot-em-up, defend your track from invading aliens. Nice and fast.

Aqua Racer
A speedboat simulation, race against the clock, but be sure to avoid other competitors for they are ready and willing to knock you off! A fast and addictive game.

Frenzy!
Fill in the screen with boxes but watch out for certain parties may want to stop you. Primitive graphics and sound but an increasing challenge all the same.

Circus
A graphic adventure from Adventuresoft. A reasonably good adventure game. Bit difficult, but that's not necessarily a bad thing.

I regard under 50% of these games as "worth buying" – compilation or no compilation. The point is the bundle game packs are now so good that it is not enough to just lump any ten games together. People want good games – all good games too, not half good and half naff. My personal recommendation for the best compilations around go to Now Games I & II, They Sold A Million I and Zzapp Sizzlers in that order.

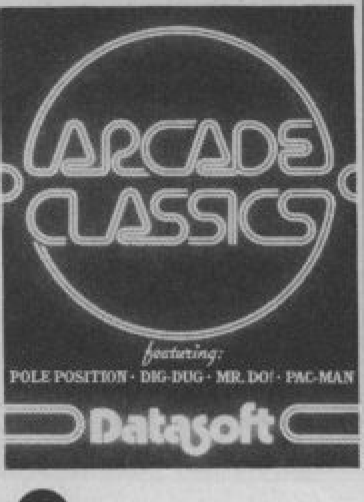
Ferdy Hamilton

Rating	Score (1–10)
Graphics	5
Sound	4
Toughness	5
Endurance	5
Value	4
Overall	**4**

ARCADE CLASSICS

COMMODORE 64/128 DATASOFT

Price: £9.95/cass



Looks like now is a good time to build up your games collection, with all these compilations about. This one is from Datasoft and contains some "Golden Oldies" from the arcades.

Dig Dug
An old Atari game from '84. You must tunnel through the earth collecting treasures, and killing any monsters you come across. There are two types of monsters: "Pooka", a big fat clumsy thing and "Fygar" a fire-breathing dragon. You can kill both in two ways, by either shooting them three times with your pump-gun, or under-mining a boulder causing it to drop on their heads!

As you get further on in the game the treasures get richer, but the monsters get faster.

Once a firm favourite, but now looking a bit dated.

Mr Do!
Although two years old this game still features strongly in my games collection.

You must guide Mr Do through the cherry field eating all in your path. Naturally you'll have to watch out for the nasties. If you bump into any of them death is certain. You need to be quick on the fire-button to hit them with your power-ball. Shoot all the letter shaped monsters to win yourself an extra Mr Do. There are many sheets to complete in this fast and furious game.

Pole Position
Although over two years old PP is still king of the racing games up and down the country. Sadly though the same cannot be said about this 64 version.

The game lacks just about everything. It has neither the speed nor the playability of the original. Chunky graphics and bad sound don't help much either.

The end result is below average racing-game.

Pac-man
Needs no introduction. Undoubtedly the most successful arcade game ever.

This is a faithful reproduction of the original. An excellent clone, with all the speed of the original.

Arcade classics are all basically good copies of their big brothers but I can't seriously see this compilation competing with the more recent ones. A good one for ageing arcade fans but, as is the case with Computer Hits 10, there are few other compilations around that I would advise you to think about buying first.

Ferdy Hamilton

Rating	Score (1–10)
Graphics	6
Sound	5
Toughness	7
Endurance	7
Value	7
Overall	**7**


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R.M.S. TITANIC

COMMODORE 64/128
ELECTRIC DREAMS
Price: £9.95/Cass £14.95/disk

C'mon, admit it, you can't help being fascinated by the demise of the splendid liner — the Titanic.

It was only a matter of time till the computer game appeared and now it has — and I would like to say right at the beginning of this review that Electric Dreams have made an excellent job of a fascinating piece of maritime history.

Your aim in the game is to raise the Titanic from her watery grave and claim the jewels, cash, and gold reputed to be stashed away in the ship's safe.

As captain of the salvage vessel you use the TSI (advanced salvage device equipped with robot arm and cameras) to explore the Titanic.

Time is crucial to you as you need to show results quickly to generate good press and keep your backers happy.

The T.S.I. can only be sent down once a day — so you have to make sure each visit is productive. The device is in two-way communication with the ship, so that you can decide what to do with an object when it has been identified.

The T.S.I. also has its limitations and can only carry four objects at a time — so you have to think carefully before using the robot arm to pic something up.

The screen display on the main salvage vessel shows a calendar with the current day ringed, a dive icon for using the T.S.I., a finance icon for talking to your backers (you have to keep them sweet), a press icon for talking to various reporters around the story (this is big news, and you need to keep the press interest going), a moon icon which enables you to move time forward quickly to the next day and to give your crew a good night's sleep, and finally there is a save game icon.

Each of these leads to more screens depicting that particular aspect of the game.

In order to get the Titanic back to the surface you will have to inflate eight bags placed at strategic points around the ship. When they have



Main play icons and calendar showing fateful day ringed.

WAR PLAY

Looks a bit like a Commando clone but plays nothing like it.

COMMODORE 64/128
ANCO
Price: £7.95/cass

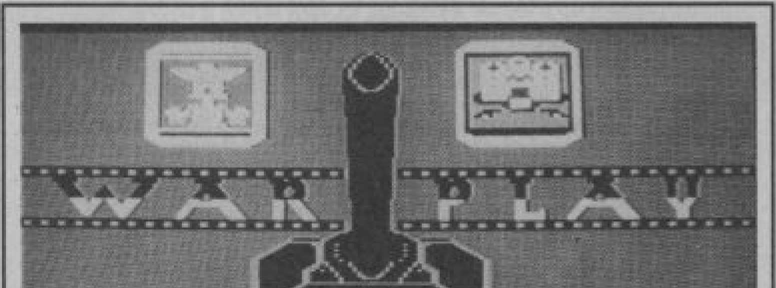
There comes a time — very rarely — when you load up a game and you can't think of anything to say about it. You look at it, go through the motions whilst your mind goes blank. Nothing, absolutely nothing. I'm at a complete loss as to what to say about War Play, but I'll try.

War Play is an arcade shoot 'em up. The scenario, the cover informs you, is to invade an island, knock out the command posts and then go on to wipe out the enemy commander's headquarters. You are given three methods of attack. In each case you control a single object with the joystick. Select from the menu either a tank, bomber or fighter. Each has its own failing so it doesn't matter.

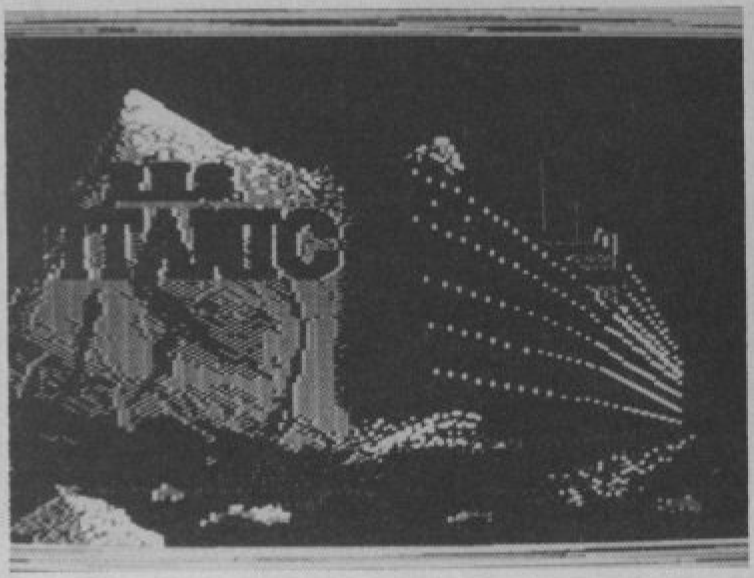
The tank is the slowest but the easiest to control — there are shades of Beach Head here. It's speed though makes it an easy target for the opposition's helicopters and more ridiculously some kind of robot like animal (oh dear, powers of description elude me here) which comes along and obliterates you if you get stuck.

The fighter is forward firing and more manoeuvreable. However to destroy anything of significance you have to fly down to ground level — shades of Zaxxon. Since the playing area is so small though, the chances are that you'll fly into something whilst lining up a target. Trigger action as with all assault craft is slow and boring.

The bomber is slow and naturally drops its payload vertically. The problem I encountered here was the impossibility of hitting anything. Often you never see a hit because the scrolling takes your target out of



OK title screen, shame about the game.



▲ Gripping title screen shows Titanic about to hit the iceberg.

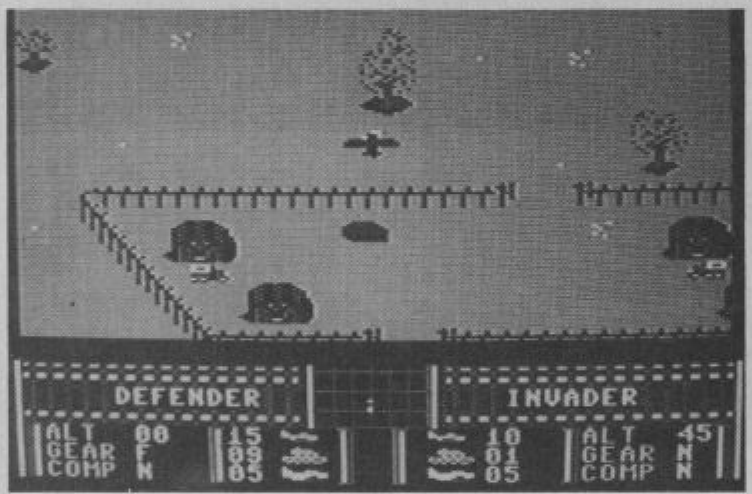
been filled with air the Titanic will float to the surface.

I haven't managed this yet. Its tricky because you don't know where the previous T.S.I. left the bags. You have to find them and quick, before the backers get cold feet.

This is a great game. It's tough, interesting, and addictive. Bit of simulation, and a bit of arcade adventure — style puzzle. Definitely not for shoot 'em up nuts but if you like your games challenging and stimulating don't miss it.

Eugene Lacey

Graphics	7
Sound	5
Toughness	8
Endurance	8
Value	8
Overall	8



sight before the bomb drops on it. Your lack of speed also means you are likely to be rammed by this little buzzing object (descriptive inspiration again eludes me here).

In all the time I played this game I never hit a blockhouse or felt as if I was getting anywhere. Shoot 'em ups as I've said before should give a sense of satisfaction at the sight of the enemy being blown away. Raw Plug is devoid of any reward for perseverance.

All we can be thankful for is that Anco had the decency not to give it a gross title like *Raid over Libya*. I'm at a loss to add anything else to enlighten you. No more games like this on the 64 please.

Mike Pattenden

Graphics	4
Sound	2
Toughness	8
Endurance	1
Value	1
Overall	2

TOUCHDOWN FOOTBALL



▲ Look closely at that scoreboard and you will see that I am 7.0 up in the first quarter Boast, boast.

COMMODORE 64/128
ARIOLASOFT
Price: £9.95/cass £14.95/disk

Hud, hud, hud — and the American Football games continue to appear in the wake of the sport's new found popularity. This version comes from American house Imagic but fails to measure up to Ocean's home-based effort.

The problem with *Touchdown* is that it goes for a more graphical representation à la Ten Yard Fight. That makes the figures very small and antlike. When they rush together the result is a blue black splurge on the screen. A blot on Ariolasoft's copybook you might say.

The game though isn't all bad. Options allow you to play another opponent, the computer or even watch the computer play itself. The computer is something of an expert so you're better off playing a mate. Quarter lengths are optional from five to fifteen minutes and all relevant information is displayed on the top of the screen unfussily.

Each side picks its formation for offense and defence. Depending on your choice the teams line up in the appropriate positions. This is where the game gets complicated because it helps to know your possible positions and what they're for. I don't know them all so I tended to work a bit blindly. The instructions do give some help.

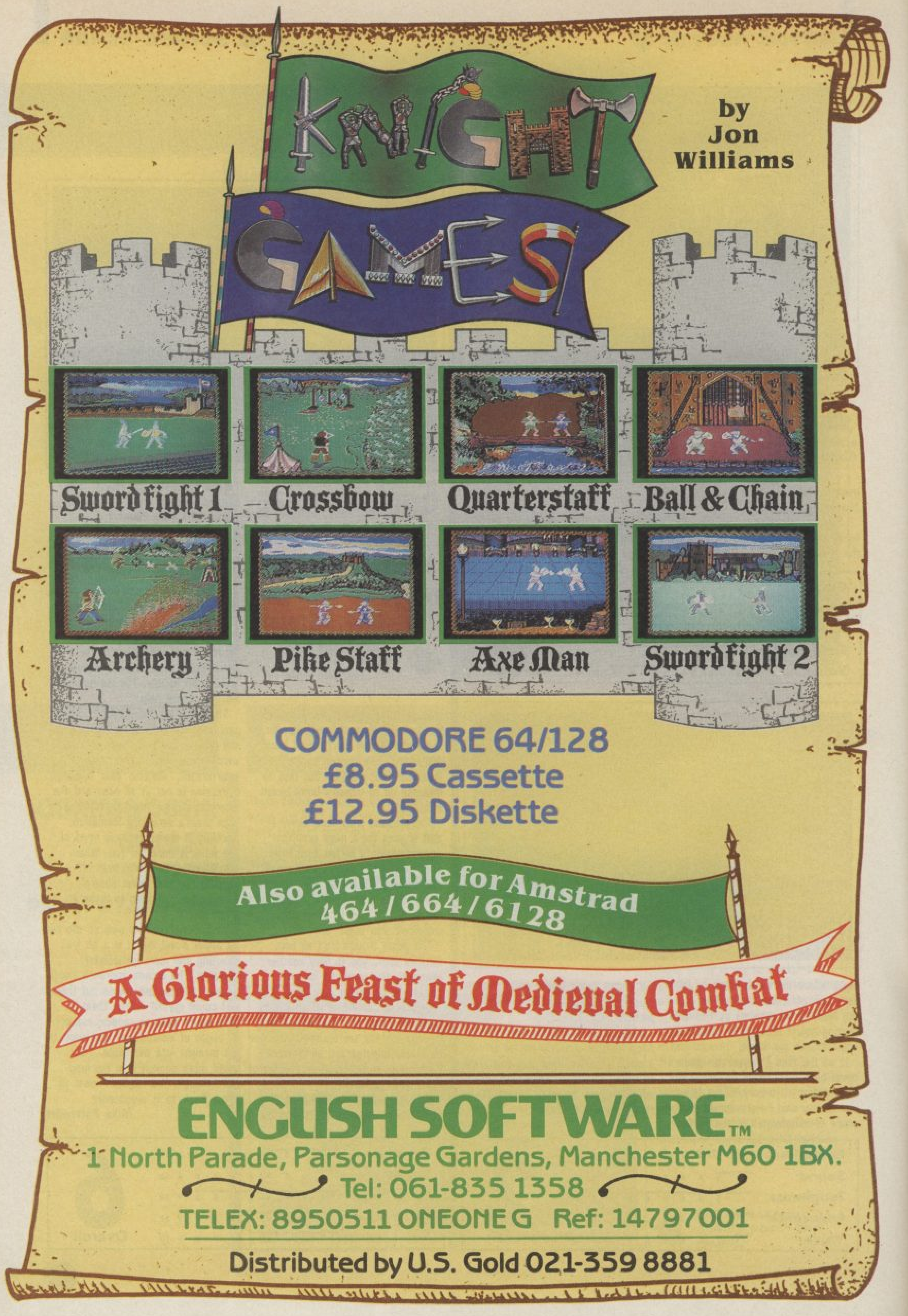
The game starts in earnest when you snap back the ball. The rest of the players begin to move of their own accord. You control the quarterback, likewise your opponent.

Passing is not at all easy and the direction of the throw depends upon your team's attacking formation. Tackling is easier because most of the work is done for you. When playing defence you're best off keeping the man under control hanging back waiting to make an intercept.

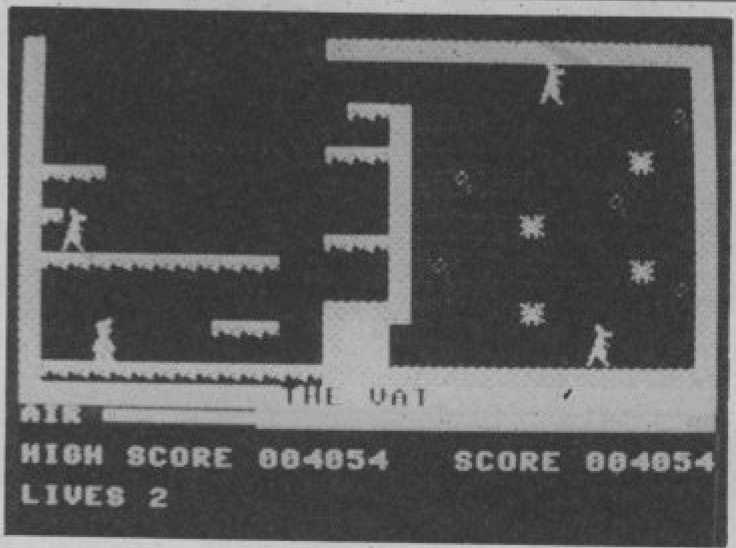
Touchdown isn't as nice on the eye as *Super Bowl*, but it is a bit less exacting and more immediately playable. The arcade approach should appeal to those lazy types out there — I count myself among them — who aren't keen on reading masses of pages of instructions and want to get straight into the game. This could work against it in the long term though. You mightn't want to come back to it repeatedly.

Mike Pattenden

Graphics	4
Sound	1
Toughness	8
Endurance	5
Value	5
Overall	6


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● MANIC MINER



How is Miner Willy going to get those keys, avoid the kangaroos, and get onto the next screen?

COMMODORE 16 and Plus/4
SOFTWARE PROJECTS
Price: £5.95/cass

Whilst waiting for the game to load, I passed the time refreshing my memory of this game reading the inlay card. It all came flooding back.

Miner Willy while prospecting down Burbiton Way, stumbles upon an ancient, long-forgotten mineshaft. On further exploration, he finds evidence of a lost civilisation far superior to our own, which used automatons to dig deep into the earth's core. Actually all the information you need to know is shown whilst the game is being loaded anyway.

I don't think there can be anyone who enjoys computer games, who doesn't know how to play *Manic Miner,* but I will explain the basic idea of the game just in case.

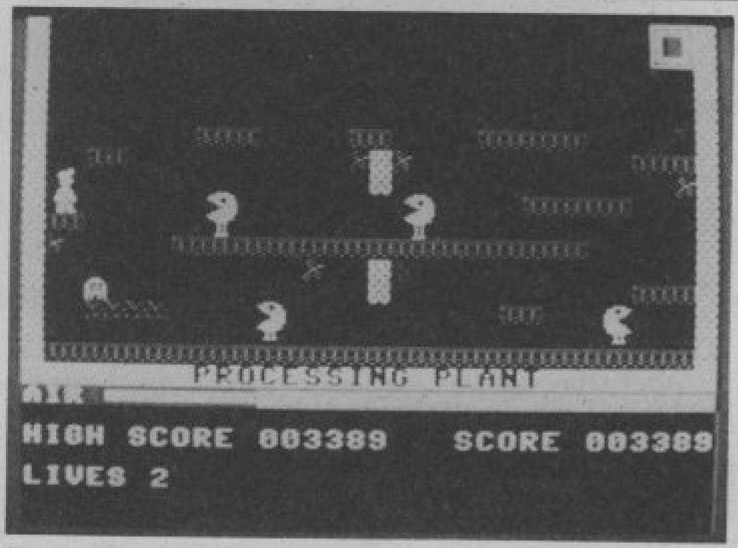
You control Miner Willy and the idea is to collect the flashing objects from inaccessible places, avoiding the inevitable nasties like poisonous pansies, spiders, slime and manic mining robots. Conveyor belts and jagged pieces of rock also hinder your attempts to conquer the game. Fall heavily and you lose a life, and don't forget there is only so much air in the cavern so time is of the essence. The only pro is a bonus for fast completion of a screen.

The game starts off in the famous 'Central' cavern, where you have to collect all the keys, whilst avoiding the mining robot and thistles. Once Willy has collected all the items, he has to go to the portal to be transported to the next screen. My favourite screen is the Abandoned Uranium Workings, Miner Willy has to jump from ledge to ledge collecting the keys as he goes. Just get one foot out of place and it's a long way down. I can get as far as Eugene's Lair, and that is my lot. And oh, how I've tried and tried to get past it.

The quality of graphics on these screens are excellent, well done Software Projects, this conversion works really well. The only criticism I have is the sound, or lack of it. When the famous Manic Miner tune has gone, the only sound you hear is when you die or collect objects (and even then its only a click), perhaps a cheer would be appropriate.

Also the game starts playing

Dodge the mutant Pac Men in the processing plant.



● PHARAOH'S TOMB

C16 and Plus/4
MAGNIFICENT 7
Price: £4.95/cass

Well, well, what have we here. Could it be another company cashing in on the success of ancient Egyptian games like *Entombed* and *Scarabaeaus*?

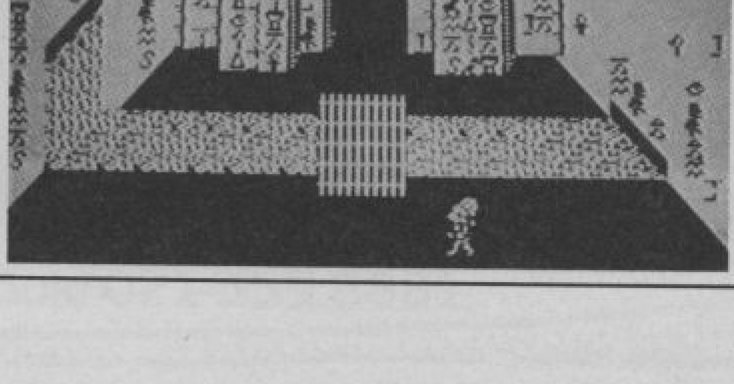
My philosophy has always been that there's nothing wrong with ripping off other people's ideas as long as you make a good job of it. Not to put too fine a point on it, Pharaoh's Tomb is the biggest pile of garbage I've seen since the binmen went on strike.

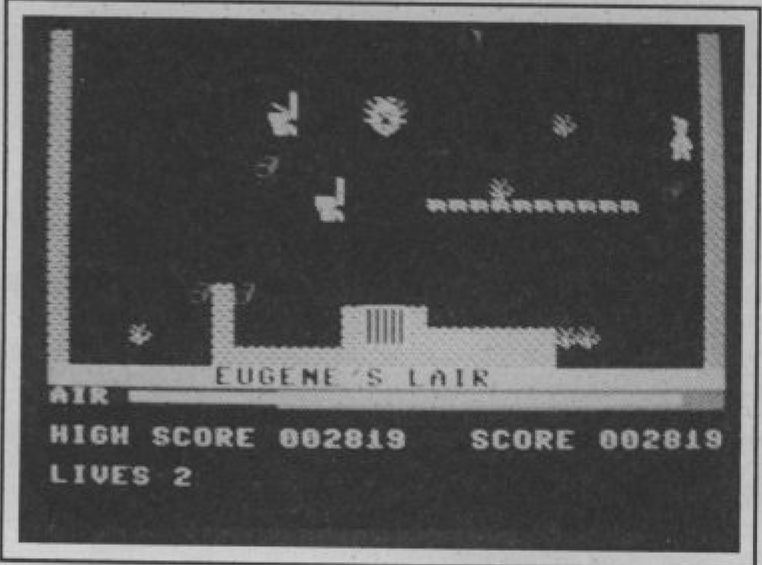
Here's the story. You are an intrepid explorer taking an afternoon stroll through the Valley Of The Kings when you stumble across hieroglyphics telling you of the evil reign of an ancient wizard. The secret of the wizard's power is the triangle of the Gods, the key to which he has broken into four parts and scattered throughout the pyramid.

What annoys me about this is that it was obviously written on the back of an envelope one lunchtime in the pub. Where's the research? The consistency? Wizards in ancient Egypt, what are they talking about? And everyone knows there are no pyramids in The Valley Of The Kings. Unimportant you may think, but this is what's supposed to be selling you the game and setting the mood.

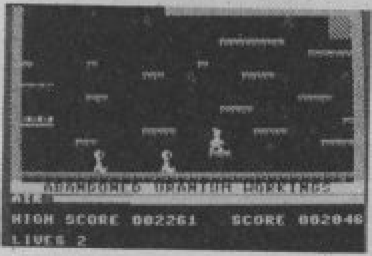
And so to the game. 'A graphical adventure with many hi-res screens' it says. For which read a graphical adventure with not that many

Pharaoh's Tomb — we are talking naff.





Our Editor's favourite screen — Eugene's Lair. Fame at last.



Very precise jumps here if you are going to get out of the abandoned Uranium workings.

automatically, so if you want to play you have to loose all of your lives, so you can start your game. It would have made life a lot simpler if you could have just pressed Fire to start.

Having said that, *Manic Miner* is a fast and addictive game, you just have to have one more go, until you are up half the night trying to conquer it. MM is not the most original game in the world any more, but I cannot imagine my C16 collection being complete without it.

Let's hope that Software Projects convert *Jet Set Willy* and *Jet Set Willy 2* in the not too distant future as well.

James Pickering

	Rating (1–10)
Graphics	9
Sound	1
Toughness	8
Endurance	7
Value	9

9 Overall

screens otherwise we would have told you exactly how many. I would say 20 to whack.

It's not so much the number as what's in them. The rooms all look pretty much the same except they have doors in different places. The hieroglyphics on the walls actually don't look too bad. The programmers have decided to throw the best stuff at you first.

When you move into the second chamber a mummy with trailing bandages lumbers towards you. This is where the first problem arises. The characters have been designed on a grid much larger than the space they occupy and when they come anywhere near your man, bits of him disappear as the two 'sprites' overlap. It gives the game a very amateurish appearance. By the way, I said characters, but the other one is a spider. Apart from you they are the only things that move, not including a rectangular shaped thing that looks like a mistake.

There are four parts of the key to collect and I managed to get hold of three of them in about ten minutes. I also found an apple and a spade obviously intended for some purpose. I would advise you to steer well clear of Pharaoh's Tomb. It's a pretty shoddy piece of software and I don't think much time or thought has gone into producing it. The only professional looking thing about it is the packaging.

Ken McMahon

	Rating (1–10)
Graphics	4
Sound	1
Toughness	2
Endurance	1
Value	1

1 Overall

KICK START

C16 and Plus/4 MASTERTRONIC

Price: £1.99/cass

The aim of the game, as Mastertronic like to say, is to ride your dirt bike through sixteen screens filled with some pretty tough obstacles.

The first thing that strikes you about the game is the great intro music. The sound on C16 games improves with every new release and this is no exception.

Hit the fire button and your trusty two stroke revs into action. You travel across the screen towards the right as the ground scrolls underneath.

In no time at all you're confronted with some pretty heavy looking obstacles. Actually to begin with they're not too bad, they just get you into the swing of things. Holes appear in the ground, logs are carelessly left lying in your path, rows of double decker buses appear from nowhere. With most of these it's simply a question of getting the speed right and hitting the fire button at the right moment to jump over them. You are given a little help with the buses in the form of a springboard which launches you skyward at just the right moment. Landing is of course an altogether different problem.

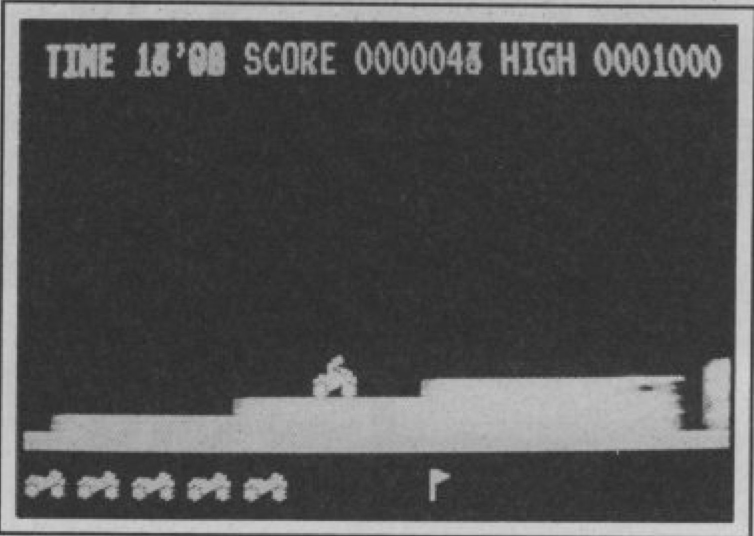
Each section must be completed within a given time limit, indicated by a clock at the top of the screen. When a section is completed your bike slows to a halt and you get a bonus for time remaining on the clock and any bikes that you have left. A replacement bike is also awarded up to a maximum of five.

There are sixteen sections altogether, as each one is completed a little flag appears on the screen. The obstacles and hazards become a lot more interesting as you progress. Section two has balloons which can be collected for bonus points, but probably the most impressive was section six, where lightning bolts are hurled earthward from thunder clouds.

If I had to make a criticism it would be that there is not really enough variety in the different sections. The same things seem to crop up repeatedly in a slightly different arrangement each time. Hence you have rows of three buses, rows of four buses, individual logs, logs in a pile, scattered logs etc. While this tends to make the game look a bit monotonous, it remains nonetheless, quite a challenge and fun to play.

Ken McMahon

Gather speed before leaping the buses.



	Rating (1–10)
Graphics	6
Sound	8
Toughness	6
Endurance	8
Value	8

8 Overall

● INDOOR SOCCER

C16 and Plus/4
MAGNIFICENT 7
Price: £4.99/cass

There are two teams and that's about the only resemblance this game bears to the real thing. You can either play against a friend — if you can interest one — otherwise the C16 is your opponent.

At kick off time you get a grandstand view of the pitch at the halfway line. As the play moves to either end, usually your own, the screen pans to take in the action. The ref blows his whistle (there isn't actually a referee, you have to pretend) and you're away — or rather the opposition is. It took me a good ten minutes to work out exactly what was going on and that was after I'd realised the instructions had told me to put the joystick in the wrong port.

During the course of play the player nearest the ball is the active one, or at least should be. He is the one who will respond to your joystick or keyboard controls. In practice the active players seem to change quite arbitrarily and you always get lumbered with the one who's in the least useful position.

Taking possession is simple you just walk up to the ball and it's yours, unless of course the opposition have it, in which case a bit of cynical fouling is on the cards. You can kick the ball using the fire button, strength being determined by the length of time you hold it down. I reckon many hours practice would be required to produce anything like accurate passing.

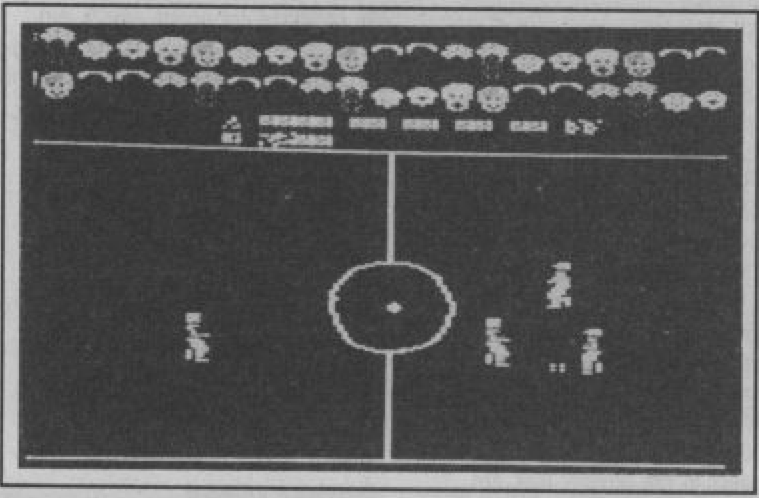
If you actually manage to score the crowd goes wild, pulling funny faces and clapping. It's a pity there's no sound here as it might have gone some way to improving things.

So what's wrong with it? Well for a start there is little resemblance between this and football. Fouls go unpunished — despite what it says in the blurb about a penalty kick (from the centre spot!). Virtually everytime I managed to gain possession I had the legs chopped from under me, dirty isn't the word. This wouldn't have been so bad had the promised fight developed — for which you are awarded a penalty — but they just wouldn't be goaded.

This was very definitely not a game of two halves. When we were supposed to change ends the score reset and a new game was started, just when I was poised for a 9-0 comeback.

On top of all this the graphics are pretty poor. The players look like poorly drawn matchstick men, are very flickery and at times bits of them disappear completely. Magnificent 7 won't score with this one.

Ken McMahon



Rating	Score (1–10)
Graphics	2
Sound	1
Toughness	6
Endurance	2
Value	2

2 Overall

THE ● RETURN OF ROCKMAN

C16 and Plus/4
MASTERTRONIC
Price: £1.99/cass

You must guide Rockman, or Boris, depending on whether you read the inlay or the screen, through ten caverns in the hunt for precious diamonds. No prizes for guessing you are playing a Boulderdash rip-off.

The caverns are made up of hundreds of boulders perched precariously on top of one another and the diamonds are to be found nestling in between.

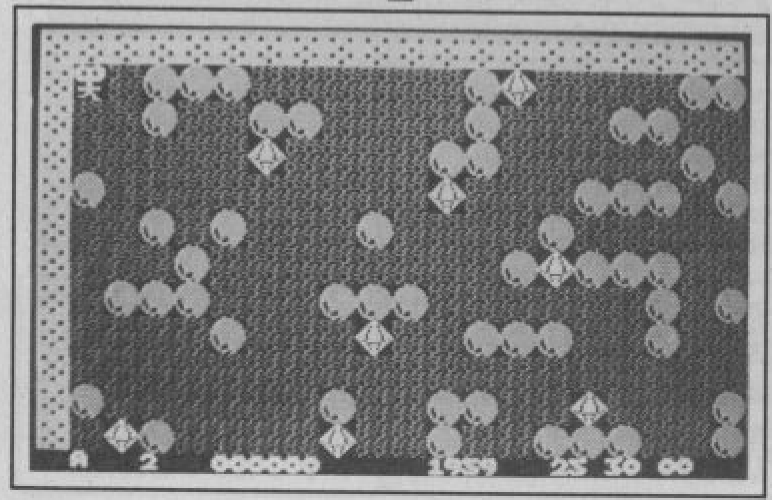
After what seems like an age, but is probably about five seconds, the pink square transforms itself into Rockman proper. And what a sorry sight he is.

There is a very slight delay between moving the joystick and Rockman actually going anywhere. This can be crucial when the slightest wrong move can result in an avalanche of boulders falling on your head. There's nothing more frustrating than losing lives because of someone's bad programming rather than your own lack of skill.

While we're on the subject of poor programming there's another thing. Most maze games that feature scrollerama — i.e. the scenery scrolling behind as you move around — keep your man in the middle of the screen so that you can see what's going on all around. Not so Rockman. He moves up to within about half an inch or so of the screen edge, then things start to scroll. This is completely and utterly hopeless. Unless you progress one tediously slow step at a time you don't know what's about to come at you from the edges of the screen.

Quite honestly I didn't discover any of this because the game proved so boring and frustrating on level one I couldn't bring myself to go any further. This game has so many other drawbacks that I find it hard to see it being well liked by anyone.

Ken McMahon



Rating	Score (1–10)
Graphics	2
Sound	4
Toughness	9
Endurance	3
Value	3

2 Overall

COMMODORE 64 CHART

1	Uridium	Hewson
NEW	Superbowl	Ocean
NEW	V	Ocean
4	Hardball	U.S. Gold
NEW	Bomb Jack	Elite
NEW	Zapp Sizzlers	Gremlin Graphics
NEW	Ping Pong	Imagine
8	Kane	Mastertronic
NEW	Phantom of the Asteroids	Mastertronic
10	Yie Ar Kung Fu	Imagine
11	Kung Fu Master	U.S. Gold
NEW	Comp. Hits 10 Vol. 2	Beau Jolly
13	Zoids	Martech
14	F.A. Cup Football	Virgin
15	Elektra Glide	English
16	Last V8	Mastertronic
17	Master of Magic	Mastertronic
18	Mercenary	Novagen
19	Eidolon	Activision
20	Kik Start	Mastertronic

CHART CHAT

Few surprises this month. Uridium holds its own despite a strong challenge from Ocean's latest releases Superbowl and V. These may not sustain their challenge though with the imminent release of Spindizzy and Starquake. Elektra Glide slumps in its second month – not unsurprisingly for a game whose strongest selling point was its cult movie title.

Over on the General chart Green Beret's appearance at three demonstrates the strength of challenge it will make when it's finally released on the 64. Bombjack's placing at three clearly owes more to the Spectrum version which was undoubtedly better than the 64 offering.

This chart is based on the MicroScope chart as compiled by Gallup.
GALLUP
[illegible]

GENERAL

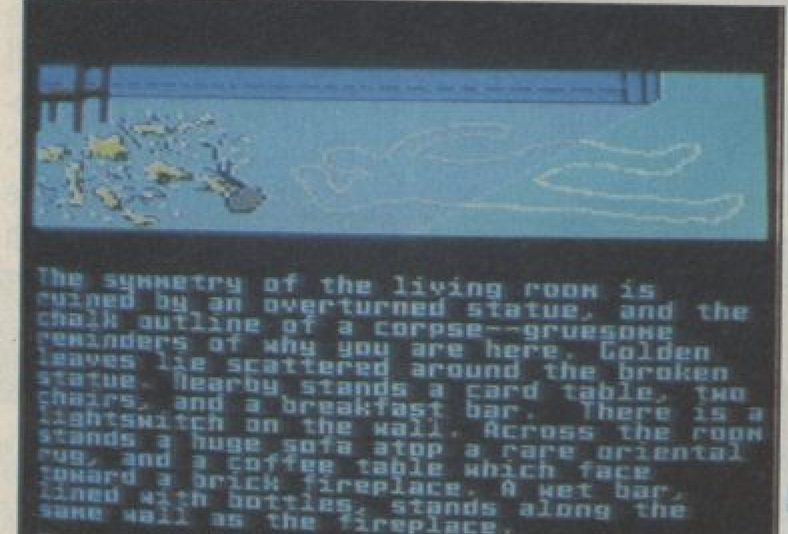
NEW	Way of the Tiger	Gremlin Graphics
NEW	Bomb Jack	Elite
NEW	Green Beret	Imagine
NEW	Superbowl	Ocean
5	Commando	Elite
NEW	V	Ocean
7	Formula One Simulator	Mastertronic
NEW	Comp. Hits 10 Vol. 2	Beau Jolly
9	Last V8	Mastertronic
NEW	Ping Pong	Imagine

C16

1	Mr Puniverse	Mastertronic
NEW	Bandits at Zero	Mastertronic
3	Big Mac	Mastertronic
4	Formula One Simulator	Mastertronic
5	Commando	Elite
6	BMX Racers	Mastertronic
7	Winter Olympics	Tynesoft
NEW	Rockman	Mastertronic
9	Tutti Frutti	Mastertronic
10	Squirm	Mastertronic

INTO THE VALLEY

The Valley is pleased to welcome a new regular adventurer in the shape of Keith Campbell, the best known adventure writer around. Over to you Keith . . .



Victor Kapp died — you must find out who squeezed the trigger.

Perry Mason: The Case of the Mandarin Murder

Telarium
GrA
Price £19.95
Disk only:

There was a broken statue scattered all over the apartment floor, and a gun next to where they found Victor Kapp's body. He'd been shot in the back, and the gun belonged to his wife Laura, who was wandering round in a state of delirium.

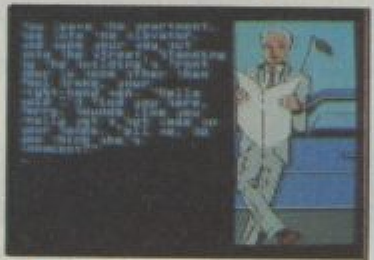
Laura was carted away to prison, pending trial, and kept under heavy sedation. Trouble was, only the day before, she had been to see you, Perry Mason, world famous criminal lawyer, to ask you take on a case for her. You had agreed to see her the next day, to discuss matters. Now, suddenly, you find yourself about to defend her against a murder charge. Will you be up to it?

Remember Perry Mason? He's the fictional detective created by Erle Stanley Gardner, and was played by Raymond Burr in a television series some years ago. The game presents one of his cases, in a very realistic simulation.

There are two stages in the game, which is quite different from most adventures. Before the trial begins, you can visit the apartment under the watchful eyes of the police, to view the scene of the crime.

Here, you get the chance to examine everything down to the toilet, (which turns out to be a standard Grade A All-American model). There are areas the police still have roped off, and it's all too easy to try their patience and get thrown out prematurely, before you've had a chance to get the maximum benefit from the visit.

Next you can move between your office and the prison. The office is where your legal assistan, Della Street, works, and where your private eye, Paul Drake, will leave reports on any investigation you have asked him to carry out (and perhaps a bit more besides). A visit to the prison is rather depressing; Laura does not make much sense, and most of her mumblings are incoherent.



Paul Drake, your sleuthing assistant

Having discovered all you can, you enter the second phase, the trial. This is the major part of the game, and where you are put to the test. You are 'steered' through this rather clever simulation, and your commands consist mainly of questions to the witnesses. These are first questioned by the DA's men, and between questions you can wait to hear the answer, give instructions to Della or Paul (who can investigate and report back while the trial is in progress), or raise an objection.

Mind you, you must be careful to have good grounds for objecting. If the objection is not sustained by the judge, the jury may think you are being deliberately obstructive, and draw their own conclusions.

There are plenty of suspects, and not all of them are witnesses. Some witnesses have things to hide, and it's up to you to try to hit their weak point, with questions like: *Miller, describe your relationship with Victor.* Commands can be quite complex, and a comprehensive guide is included in the package, detailing not only the game's vocabulary, but the command structure in a table of columns. In practice, this isn't as complex as it sounds. Nor are the legal rules governing grounds for objections.



The lieutenant gets a grilling in the witness box.

After each witness leaves the stand, you are presented with the jury's attitude towards your cross examination. If you get really stuck for a question, there is always Della on hand to give you a few suggestions. What really counts, of course, is the jury's final verdict, for your objective is to get your client off the hook, and, if possible, discover the identity of the murderer.

by Keith Campbell

So far, I have only seen poor Laura taken away in handcuffs at the end, and I get the feeling that the plot is far deeper than I at first suspected.



You'd better have your facts right or the prosecution will have Laura led away to the slammer.

Graphics	3
Playability	4
Puzzleability	4
Overall	4

Asylum

All American Adventures
GrA
Price: Disk £14.95
Cass £9.95

Way, way back in 1981, when the Vic-20 was a new-born babe, a game called *Asylum* was released by Med Systems, a US software company. It ran on the popular home computers

of the day, the TRS-80 and Apple. After all those years, it's now available on the 64.

Asylum featured crude but effective straight line graphics, showing perspective views through a maze. The objects were all contained in boxes, presumably to accomodate the limitations of the graphics available. But there were pictures of guards, stationed at strategic positions, and doors within the maze were shown, either open or closed.

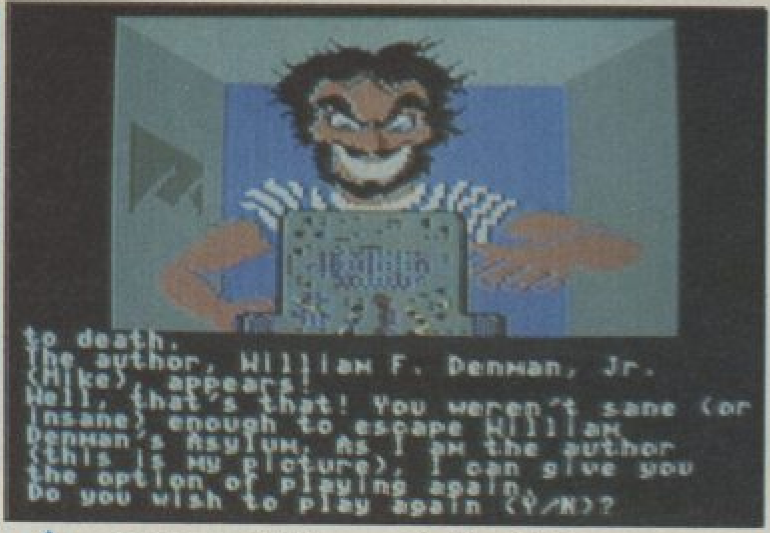
Movement forward was effected by pressing the up arrow; changing the direction faced was carried out by pressing the left, right, or down arrows. Thus, as the player moved through the maze, he could see the far wall moving towards him, and the side exits appearing, all at machine-code speed. It was a very effective system.



Looks like a Holiday Inn? No this is where you start your escape.

The clever part, which made the game an adventure rather than a mere maze game, was that pressing any alpha-character key initiated a text input mode, and the command entered was overprinted with a response in the normal adventure fashion.

The objective was to escape from the Asylum, and even though I reviewed the game back in July 1982, I have still not heard of anyone



Just one of this game's 'lively' inmates.

who actually got out! I did once bump into a couple of lunatics who had been stuck behind the exit door for about a year!

Not only was the Asylum vast, there were some extremely difficult problems to deal with, involving inmates, guards, and surgeons. Many a time was I forcibly invited in for a pre-frontal lobotomy, after which I felt very calm!

Not long ago a game called *Asylum* for the Commodore 64 and Atari was recommended to me by an American student. I wondered if it



Nice consolation screen for those who fail to break out.

was the same game in a different package.

It loaded from disk under a hi-res colour picture of an unfortunate who definitely looked 'disturbed' to say the least. I soon found myself in a room with a bed and a credit card, and an unlocked door. Not the same game after all, for the old Asylum had a couple of unlocking problems with a hand grenade and a newspaper.

However, once outside the room, the perspective maze appeared, but this time in hi-res graphics, albeit in different shades of grey. Movement smoothly scrolled forward rather than jumping forward, and when a character was encountered the disk started spinning, producing a colour image full of detail.

Soon I came across an electrician, bearing a sign saying LOOK UP. All my instincts warned me not to, warned me that I would meet a musical end! Of course, I had to check it out, and it happened — the piano fell on my head. What else would you expect?!

In fact, Asylum for the 64, is a completely new adventure written to the same format as the original. A



Yet another Asylum fruitcake.

few ideas have been carried over, but the maze layout and most of the problems are different.

The new Asylum is no easier, nor any less enjoyable, than the original. As far as I can tell, the map is even bigger, and far more complex. The new implementation has taken full advantage of the improvements in hardware capability, since those early computers.

If you like 'em hard, with no help



Would you take advice from this man?

other than a full vocabulary listing, and are prepared to be painstaking about plotting the maze, then this is the game for you!

	Scale	Bar extends to
Graphics	1 2 3 4 5 6	4
Playability	1 2 3 4 5 6	5
Puzzleability	1 2 3 4 5 6	6
Overall	1 2 3 4 5 6	5

NEWS

Three Days In Carpathia, the long awaited sequel to the very popular wartime spy adventure Valkyrie 17, is on its way. Written on The Biro, The Ram Jam Corporation's new in-house adventure creator, it will have many enhanced features over its forerunner.

The characters in the game each have their own personalities, and it will be possible to hold fairly intelligent conversations. This graphical adventure for the 64/128 is expected later this year.

Meanwhile, Ram Jam's ball-pointed answer to The Quill, will herald a whole new series of adventure releases, including a science fiction saga, *The Sock* and *Tooth Affair*; *Chicago*, a Mafia scenario featuring Rats Maldano and the Morona Brothers; and *Shadow Warrior*, an authentic Ninja adventure.

In addition, Ram Jam will be producing a number of adventure titles for release by other publishers, including *The Amulet*, planned for Mosaic, and announced in last month's Valley.

The Price Of Magic, Level 9's sequel to Red Moon, their award-winning adventure of 1985, was released during April.

Featuring more magic than its forerunner, this latest epic from the Austin stable looks set to be yet another winner for Level 9.

Take a trip into next month's Valley for a review of The Price of Magik, and the lowdown on Level 9's plans for the next 12 months.

UK PREVIEW

Infinite Inferno
GrA
Price: Disk n/a

Written by S. Hugemark and P. Henningsohn, this adventure has not been released in the UK — yet. It runs from disk on the 64, and opens with some really effective title music, to slowly unfolding credits to the authors, and to their many friends and relations.

Eventually, when Mrs. Riley was

You start here, inside a box — with a hangover.





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INTO THE VALLEY

Ultima IV

All American Adventures
GrA
Price: £19.95
disk only

Following on from Exodus Ultima III, this is a game of vast dimensions, contained on two double-sided disks. With D&D style, it could almost be described as 'arcade adventure' were it not for the fact that it is not joystick operated, and no keyboard reaction skills are required.

Honor, (you'll have to get used to the American mis-spelling!) compassion, pride, and humility, all play a part in assessing the players' character and assigning his attributes, in the opening sequences of the game. Questions of conflicting interests are asked by a gypsy, who notches up the points on an abacus, as you reply.

Play then proceeds to the Empire of Britannia. The player moves around a map of the Empire by using four direction keys. On entering a town or village, the map becomes a plan, drawn to a much bigger scale. The quest is for the formula for a better life for the subjects of Lord British, the ruler.

The display is arranged with the map in a square box, taking up the full height of the screen. To the right is a text area, showing who is in company with the adventurer, hit points, and state of health. Below this is the scrolling conversation — the key-coded commands are displayed in full.

To entertain you on your arduous journey, there is some quite catchy music of the period, which can be toggled off and on at will.

To start with, there seems little to guide you as to where you should go and what you should do to achieve your objective. But the locals are quite a friendly bunch and will quite often volunteer a useful tip or two if you talk to them.

You'll have to talk to many of them to get very far, as it's necessary to gather together a band of comrades to help you, if your quest is to succeed. So you need to know who's who, and what their capabilities are.

Conversation is about the only activity in which text is typed, and the words allowed are rather limited. However, in addition to free text, there are about twenty other commands, such as OPEN, SEARCH, ATTACK, and so on, that are issued by single keystroke. To help with these, there is a handy quick-reference card in the package. The commands are easily learned within a few minutes practice play, and once the technique is mastered, gameplay is very slick.

Not everyone in the game is friendly, though, especially the Orcs, Ghosts and Skeletons who roam the countryside, and will corner you and start attacking with no provocation. This throws you into a combat mode, in which you must dodge and parry, watching, as you do, your stength points diminishing.

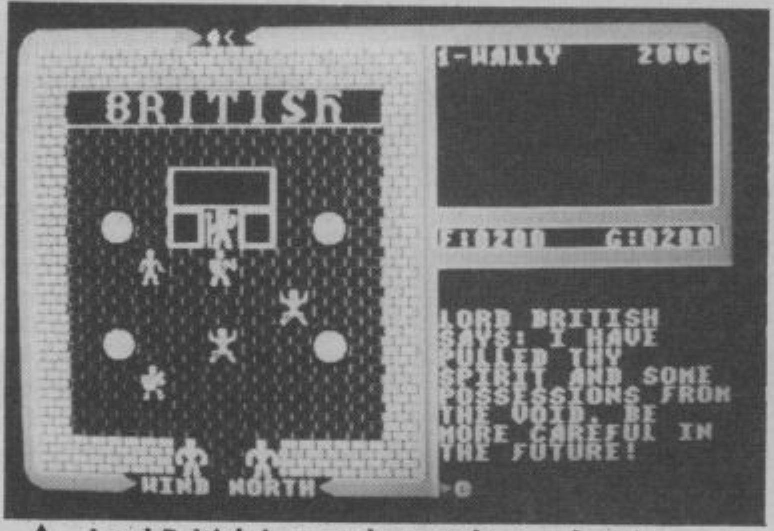
Not to worry too much if they dwindle to nothing and you die — Lord British is bountiful, and will do a resurrection job on you, back at his castle!

'Combat mode' is a feature I dread, delaying movement through the plot, and introducing an element of luck and keyboard hammering that I find incredibly boring.

Overall, though, *Ultima IV* is very playable, and has many secrets in store, waiting to be discovered! If the format appeals to you, then you won't be disappointed — it is the best of its genre I have come across.



Opening screens set the scene for the Empire to be explored.



Lord British is very benevolent — he gives you another chance.



The gypsy asks you lots of tricky questions and notches up points on her abacus.

Move around the map of Britannia using four direction keys.



Rating	Score (1–6)
Graphics	3
Playability	4
Puzzleability	3
Overall	4

commodore

128

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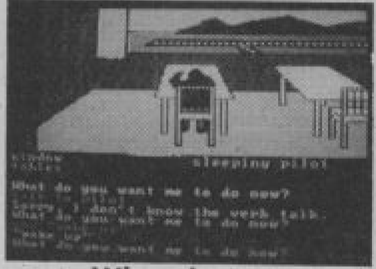
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INTO THE VALLEY

being thanked for 'those funny little cakes I got when I last visited the UK', I hit upon the idea of pressing the space bar, and the game itself started.

Perhaps I wished it hadn't, for there I was, the day I should be getting married, sleeping off a hangover after a night out with the lads — in a box! A slit of light could be seen at the top of one side, but there certainly didn't seem to be any easy way out!

There was, of course, and it was so

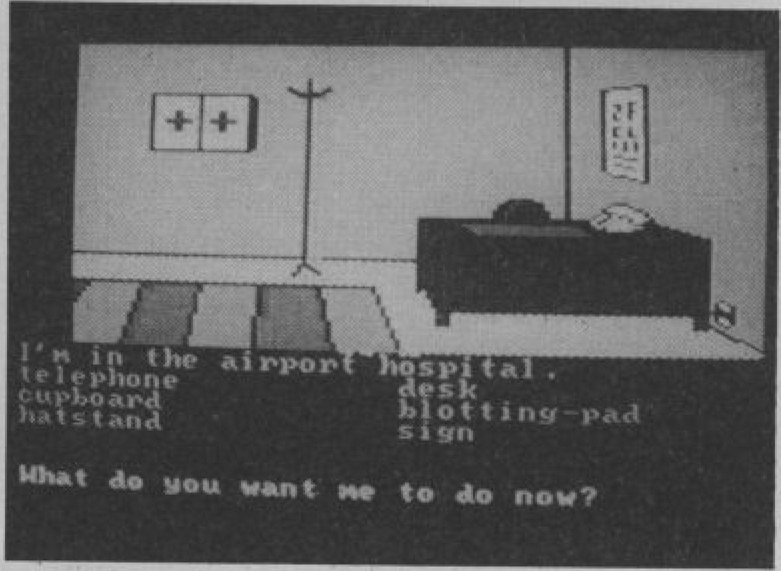


▲ **What do you want me to do now? Good question.**

easy it took me at least twenty minutes to discover how!

Now I found myself by some crates at an airport, with a drunk pilot asleep in the cafeteria. One of my mates from last night, I suppose. I fed him some strong coffee, and off he ran to the only plane I could find on the airstrip. Naturally, I followed, and soon we took off, to quite realistic sound effects. Unfortunately the journey was not to prove very successful, for after a while, the engine failed, and the pilot threw me a parachute as he bailed out. No problem now, except a stuck door, and I didn't have anything suitable to unjam it. We were hurtling groundward at a frightening speed . . .

Infinite Inferno has a nice sense of humour, excellent graphics, catchy music and sound effects. I hope U.K. adventurers will get the chance to play it.



ADVENTURE CHART

1	Lord of the Rings	Melbourne House
2	Doomdarks Revenge	Beyond
3	Kentilla	Mastertronic
4	Asylum	All American/U.S. Gold
5	Mugsy's Revenge	Melbourne House
6	Quest for the Holy Grail	Mastertronic
7	Alternate Reality	Datasoft/U.S. Gold
8	Worm in Paradise	Level 9
9	Exodus Ultima 3	All American/U.S. Gold
10	Red Moon	Level 9

NEWS

● **Nine Princes In Amber** is the title of a disk game for the 64, from Telarium. Based on two books in the Amber series by new wave sci-fi author Roger Zelazny, it's claimed to represent a breakthrough in Interactive Fiction, featuring up to forty possible endings.

Described as a game of negotiation, politics, and alliances, progress is determined almost entirely by the player's interaction with other characters.

Your reviewer had hoped to bring you the full outline of this game, but unfortunately he typed SHOUT HELP, the program crashed, and Disk A has never been the same since . . . Was this a bug, or was the disk corrupt to start with? If he can cadge another copy from the distributors, next month's Valley will reveal all!

● **The word is out** that the Commodore Amiga version of the *Pawn* will be full of them — words, that is.

Rainbird spokesman Phil Mochan told the Valley that the sound effects on the Amiga would be "mind blowing".

The rumour is that the game will actually speak to you as you wander through certain locations.

But Rainbird have now confirmed that the 128 and 64 versions will not feature the flashy graphics of the ST and Amiga dream machines.

All three versions will be available in June. The Amiga version will sell for £24.95. Prices on the 64 and 128 versions have yet to be confirmed — though it is expected that they will cost between £15 and £20.

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"NOVA TRANSFER" will **transfer to disc** the latest Nova Load programs including **multi part loaders.** A very useful utility that also includes routines to transfer "Summer Games II" and "Beach-Head II" to disc.

"DISCO" will transfer standard speed load software to disc.

"TRANS QD" allows you to save a fast load system to your own discs.

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As well as these important newcomers all the old favourite utilities which have helped earn "Disector" such a large following are included. These include **Menu Maker (selective), Fast Format, Unscratch, Disc Monitor, Disc Orderly, Fast File Copy, Index, etc. etc.**

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OPERATING "FREEZE FRAME"

"Freeze frame" is simplicity itself to use. It is cartridge based so is simply plugged into the cartridge port. When the computer is switched on a message is displayed, pressing "RETURN" will clear the computer back to the normal start up screen. Software can now be loaded from tape or disc **completely as normal.** The latest version of "Freeze Frame" will, to the best of our knowledge, allow **ANY software** to load and run normally (unlike competitive products).

"Freeze Frame" can be brought into operation at any convenient point by pressing the button on it. You can then do one of three things:—

1. **Pressing "D" will save a working version of the program in memory to a formatted disc. This version will include a high speed reload.**
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A successful product always spawns imitators and "Freeze Frame" is certainly no exception. Fortunately for us, but perhaps not for the people who have purchased them, their main similarity seems to be in advertising style.

"The Final Cartridge" is a good product in many ways, **BUT** when it comes to making backups it is just not in the same class as "Freeze Frame". Another major drawback, not made clear by advertising is that saved programs can **ONLY be reloaded with the cartridge in situ.**

"UPC1" has its uses but in its current form **cannot be taken seriously** as competition for "Freeze Frame".

"ACTION REPLAY" has no tape save, puts 8 files on a disc save and contrary to their claims we have found many programs that it can't handle.

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SERIOUS WARNING: THIS IS AN EXTREMELY POWERFUL PRODUCT AND IS STRICTLY FOR PERSONAL USE. DON'T COMPARE IT WITH ANY OTHER PRODUCT, NOTHING ELSE OFFERS THE POWER OF "FREEZE FRAME".

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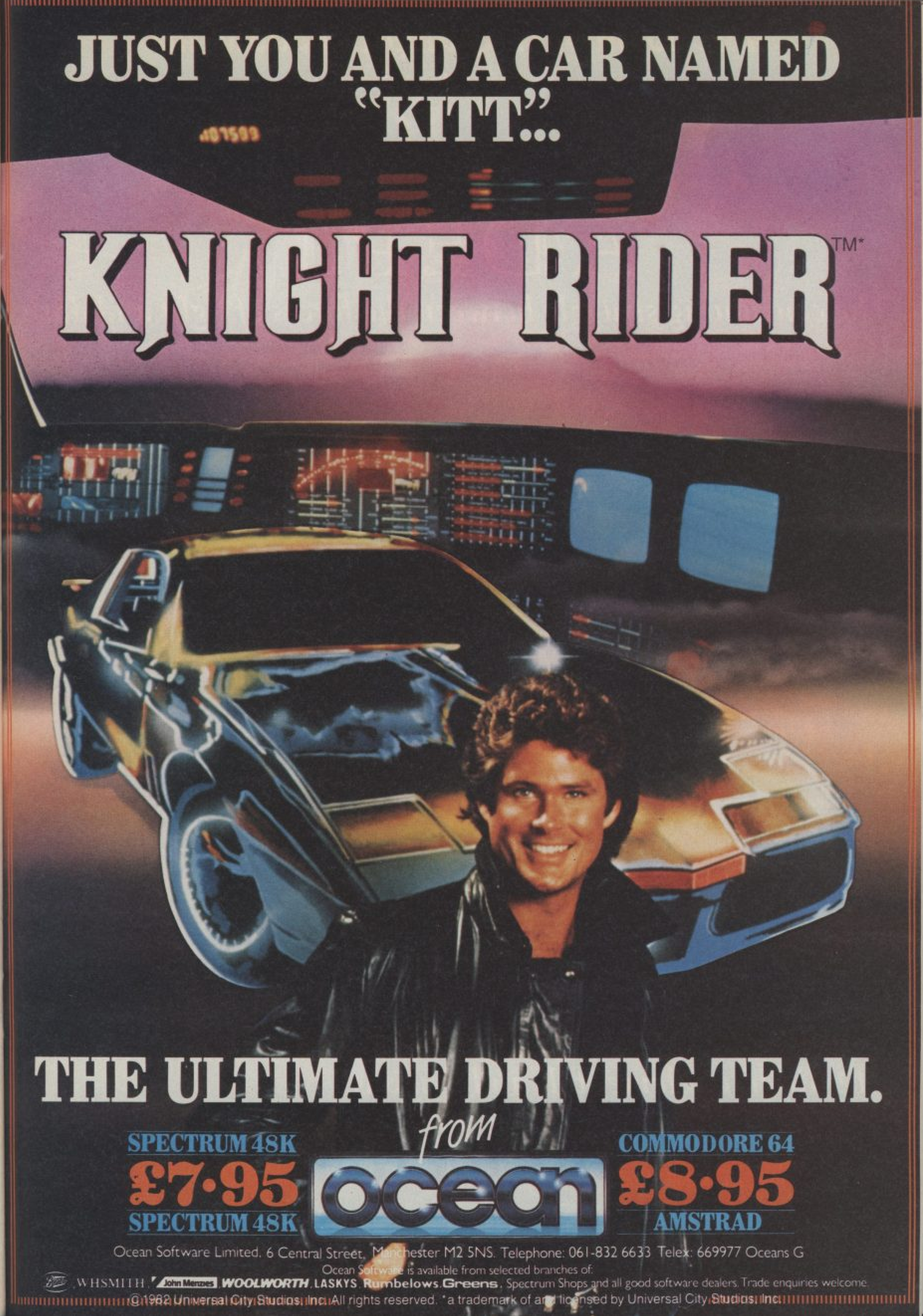
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Join the FEDERATION

With multi-user games getting bigger and better CompuNet are busy working on what they hope will be the biggest and best.

Just as MUD is the computer enthusiast's version of Dungeons and Dragons, Federation II is loosely called based on Traveller. I say loosely based because the programmers at CompuNet have spent months working on new ideas for the sort of locations and twists that only computers can provide.

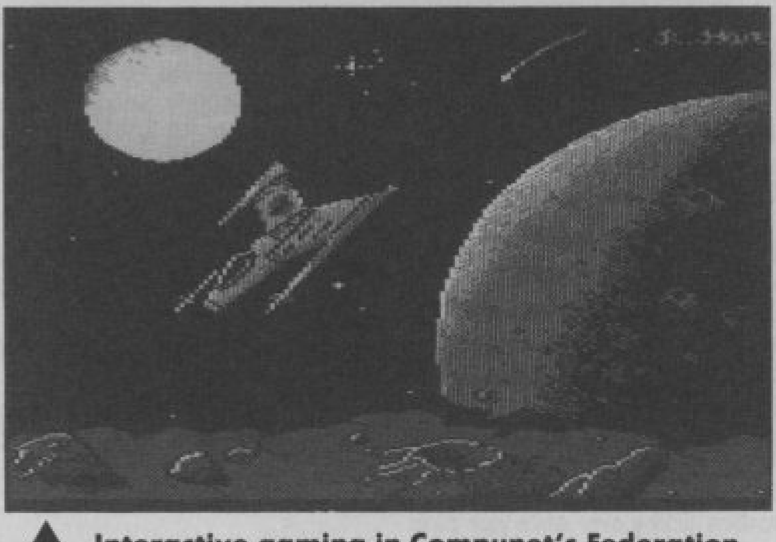
The game is played over telephone lines with up to thirty-two other players each sitting at a terminal — just like playing MUD or using CompuNet or Micronet. Unlike Micronet, where you simply summon up pages of information., *Federation II* involves getting commands. And those commands are acted upon by the computer as soon as you type them. That is important, as you'll soon see.

Although the full system won't be finished for a few months yet, I managed to get a sneak preview of it from Alan Lenton, one of the game's designers and programmers.

Basically, the game is a trading game. When you first join, you get a certain amount of Galactic Credits. With these, you buy yourself a spacecraft, a supply of weapons and enough general provisions to take on your journey. The game takes place in space, travelling through star systems from planet to planet. There are around 200 planets in the whole game, and around 7,000 locations in all. The computer running *Federation II* can't hold all 7,000 locations in memory at once, so you'll only be able to visit around 1,300 in one game. Every month or so, a different 1,300 locations will be used so that the game will never be the same twice. Compare this with most adventures where, once you know your way around, things aren't quite as exciting as they were when you first started.

Once you have bought your ship and equipment, you can go off and start earning more and more credits. That's really the idea of the game — to earn as many galactic credits as you can. Like MUD, there's no actual prize for earning more credits than anyone else in the known universe, and you can't actually achieve Wizard-like status by earning them.

However, some very powerful commands can be obtained only by buying special pieces of equipment, which cost a lot of credits. For example, a teleporter that enables you to transport yourself from one part of the game to another at any time you like is available to those that can afford it.



Interactive gaming in Compunet's Federation. Looks set to leave M.U.D. looking very grimy.

The game is both intelligent and novel. There is no swamp, like MUD, where you have to dump any treasure that you get. Instead, you can either keep it, if you that it may prove potentially useful, or otherwise find someone who can make better use of it than you and is willing to buy it from you for a reasonable price.

Finding a Martian Artifact, say, may well mean that you can sell it to one of the various mobiles that patrol the game. But you need to think — someone on Mars won't pay as much for a Martian Artifact as someone on, say, Venus.

While buying and selling is one form of making money, the main way is by carrying cargoes. Assuming you can type pretty fast, this is the way that fortunes will be made.

Occasionally, on the screen, will appear a message saying something like "Someone is required to take a cargo of grommets from Mars to Titan within 3 days".

The first user to type "accept" (I told you you had to be able to type fast) gets the contract and, when the cargo is successfully delivered, the money. However, you have to bear in mind before you accept the job you will need to travel from your current position to Mars in order to pick up the job, and all that takes time. You can't decide half way through that you don't actually want the job — you have to see it through.

Just like real life, you can put out a reward for the capture of someone who steals your own treasure. Typing "WANTED" will tell you which players currently have prices on their heads. If someone steals something from you, typing "REWARD" allows you to put up a reward. Then, if a player manages to capture the thief, he gets the reward. You don't actually get back the goods that were stolen, though — you have to negotiate that with the person who managed to retrieve them.

The game has a sense of humour, too. If you spend all the time killing fellow travellers, you'll probably find the game referring to you as so-and-so the Killer, or the Destroyer. Quite when and why these names get added is a secret, though it probably won't take people long to work it out.

Perhaps one of the most useful pieces of treasure that you can come across is a special computer terminal, buried in the ruins of one location. Tap in the correct codes and you will be able to alter your persona.

Pubs & Banks

Maybe you can tell something about the programmers who are actually writing the game by the fact that there are lots of Pubs and Banks dotted around the galaxy. Alan Lenton couldn't explain it!

Each planet has its own unique character. The biggest growth industry on Venus, for example, is the exporting of drugs. If you come across that planet, you may choose to report the drug barons to the cosmic police and claim the reward. However, if you can stifle your conscience and would like to make a bit more money, it's better to steal some of the drugs and try to sell them.

What you need to know, though, is that the only people interested in buying the drugs are on the moon. The moon, so the story goes, was initially populated by the Mafia. You'll need to find Mario and follow him in order to sell your precious cargo.

And Venus isn't the only place where the game tempts you to step gingerly on the wrong side of the law. Occasionally, when travelling from one star system to another, you will have to pass through intergalactic Customs. Whether you declare all the things you are carrying, and pay duty on them, depends on you. If you don't, there's a chance that a customs officer will choose to board your craft and search it. Getting caught will probably result in a heavy fine, but the programmers aren't certain yet.

The display that you will see on your computer screen while playing Federation II is a simple scrolling text display like MUD. Adding split screens or graphics would slow down the system, and also make it too machine-dependent. Like MUD, Federation II will be available to any micro user who has a modem. The game will work at 1200/75 baud (Prestel-like) and also at 300 baud. CompuNet recommend that you use 1200/75, as it's faster — and speed is pretty essential.

CompuNet aren't saying exactly how much it will cost to play Federation II, but they told me that it certainly won't be any more than MUD currently costs, which is 1.75 an hour.

If you think that Federation II sounds like something you'd like to get stuck into, then I'm afraid you'll have to hold on for a month or two.

The game will be shown for the first time ever at the Commodore show in May. This will be a single-user version, with a chance to sample some of the locations. The full multi-user game will probably not be up until early next year, and certainly not before this Autumn.

by
Robert Schifreen

Pardon me, 64

by
Pete Gerrard

Have you ever wondered how the 64 can make two things happen at once, like running a game and playing a tune in the background? Well, it's all down to using interrupts. This month we're looking at background tunes — next month, at graphics.

In this article we're going to discuss just one item in the 64's repertoire, namely sound, and how to generate background music so that a tune, a haunting melody, or whatever, can be played while the 64 carries on as if nothing had happened.

To do this, we must look at two important memory locations, locations 788 and 789 decimal, or $0314 and $0315 in hexadecimal. If you PEEK these when you first turn the 64 on, you'll find that they contain the values 49 and 234 respectively.

This might not tell us very much, but it tells the 64 that every fiftieth of a second or thereabouts it has to make a jump to some of it's own internal ROM routines, starting at memory location 234,49 in decimal, or more simply $EA31 in hexadecimal.

This set of routines, among other things, updates the jiffy clock, checks the keyboard, and generally keeps the machine ticking over while your Basic or machine-code program continues to run merrily on.

These two locations are collectively known as the Hardware Interrupt Vector (HIV for short from now on), and inform the 64 where it's hardware is to be interrupted. By careful use of machine code, and altering the content of these locations (since they are stored in RAM after all, not ROM) we can make the 64 do just what we want — play that background music.

Altering registers

To alter the content of the HIV just requires a straightforward POKE, like this perhaps:

POKE 788,00:POKE 789,192

to send program execution off to a routine starting at location 192,00 ($C000 in hexadecimal) every fiftieth of a second and perform whatever operation it finds there, before ultimately winging its way back to the routine beginning at $EA31 as usual.

This is very important: we might divert the HIV, but it has to get to $EA31 eventually, otherwise everything will come to a grinding halt.

But so far there isn't a routine starting at location $C000, or whatever, so what should we put there? The answer is that we can put anything we like, always remembering to get back to $EA31 in the end. So, type in and run the following short listing:

```
10 FORI=0TO12:READA:
POKE49152+I,A:NEXT
20 END
100 DATA 169,001,141,000,004,
169,000,141,000,216,076,049,
234.
```

Not very spectacular: all this does is to display a letter 'A' in the top left hand corner of your screen, by altering the HIV to go to $C000 before going to $EA31.

To go back to $EA31, you simply type:

POKE 788,0:POKE 789,192

Now, whatever you do, that heart will stubbornly remain on the screen, unless you change the background colour to black and make it seemingly disappear that way.

To return the 64 to normal, enter:

POKE 788,49:POKE 789,234

and all will be as before.

Down To Business

Well, that's the theory, just put a routine into some convenient place in memory, and then alter the HIV so that it's diverted to go to your routine first, before traipsing off to $EA31 as usual.

Below, you'll see our wonderful background music program. And we can treat this in exactly the same way as the simple routine we've just typed in.

To explain the first few lines of the program, lines 10 to 40 read in all the data and POKE it into the appropriate part of memory.

Lines 100 to 120 should be familiar enough to anyone who has dabbled with sound on the 64. The variable V is declared to be 54272, and then the program sets up volume, ADSR settings and so on for voice three.

The SYS call in line 130 activates the routine, and the next line POKEs a set of values into zero page that will later be used by the machine-code program itself.

You needn't worry about altering those, but obviously you can get the



Make use of interrupts

Part one

```
10 SE =  49152 :EE =  49456
20 :
30 FORI = SE TO EE : READ A : POKE I . A : NEXT
40 :
100 V=54272:POKEV+24.15
110 POKEV+19.30:POKEV+20.36
120 POKEV+16.250:POKEV+17,40
130 SYS49152
140 POKE251,178:POKE252.192:POKE253.178:POKE254.19
2
150 END
50000 DATA 234.234.234,120.169.080.141.020.003.169
,192.141.021.003
50001 DATA 088.234,234.096,120,169,049.141.020.003
.169,234.141,021
50002 DATA 003.088.234.096,234,222,222.222.222.222
,222,222.222,222
50003 DATA 222.222,222,222,222.222.222.222,222.222
,222,222,222,222
50004 DATA 222.222,222,222,222.222.222.222,010,008
,000,065,000.000
50005 DATA 000.000,000,000,000.065,000.000,000.000
,234,234.234,173
50006 DATA 066,192.240.004,076.049,234.234,206,065
,192,208,247,234
50007 DATA 234,234.173,064.192.141,065,192,234.230
.251.208.002,230
50008 DATA 252,234,160,000,177.251.201,255.240,040
,234.234,234.234
50009 DATA 160.000,141,015,212,230,251,208,002.230
,252,234.177.251
50010 DATA 141.,014,212,173.067,192.072,169.000,141
,018,212.104,141
50011 DATA 018,212.234,234,076.049,234.234,234.234
,165.253.133,251
50012 DATA 165,254.133,252.076,100,192,000.000.000
.000,002,103,002
50013 DATA 103.002,179.002,179.002.220.002.220.003
,054,003,054.003
50014 DATA 154,003,154,002,220,002,220,003,154.003
,154,000.000.000
50015 DATA 000.003.154,003.154.002,220,002.220.003
,154,003,154.000
50016 DATA 000.000,000.003,154,003,154.002.220.002
.220,003.154.003
50017 DATA 154.000,000,000,000.002.103.002,103,002
,179,002.179,002
50018 DATA 220,002,220,003.054,003.054.003,154.003
,154,002.220.002
50019 DATA 220.003,154,003,154,004.207,004,207,004
,073,004,073.003
50020 DATA 154,003,154,002,220.002,220,003,054,003
,054,003,154,003
50021 DATA 154,000.000,000.000.000,000,000,000.255
,255
```

ADSR etc. settings to be whatever you like.

To alter the waveform, you must POKE 49219, WF where WF is the usual 17, 33, 65 or 129.

Then comes the data, which not only contains the machine-code routine that takes care of everything, but also the data for the notes that the 64 is going to play: in this case, the Hall of the Mountain King. Later on we'll see how you can very easily put your tunes into memory, up to a maximum of around 900 notes.

How it works

The machine-code program is quite short, and essentially just reads values stored in memory and deposits them in the appropriate locations for playing a note for voice three, before going off to $EA31 as usual. Now this is where you come in.

The data for the notes to be played starts at location $C0B3 (or 49331 in decimal). Look at line 50012 in the data statements. At the end of this you find the values 002,103,002, with a 103 at the start of line 50013.

These represent the high and low frequency values for various notes, and tell the 64 to play what your 64 manual refers to as note D-1, followed by another D-1.

So, to enter your own tune, work out what the notes are, turn to the 64 manual and find the high and low frequency values for that note and alter the data statements, or POKE the values into memory. If you want to introduce a pause, enter both high and low frequencies as zero.

When you've got the complete tune into memory, enter the values 255,255, and when the program reaches that it'll loop all the way back to the beginning and start again.

You could use all three voices if you wanted to, merely by jumping from one routine to another before heading off for $EA31 as usual, but that is left for you to experiment with.

To turn everything off and get the 64 back to normal again, type:

POKE 54296,0:SYS 49170.

As you can see, the HIV, if properly handled, is a powerful beast, and can be used to stretch the 64 that little bit further than normal. Producing background music as we've done here is just one possibility, but there is no reason why interrupt driven routines such as this one cannot be linked together to perform a whole host of different activities, such is the speed of machine-code.

● Stay tuned next month when we'll be showing you how to use interrupts to control graphics.

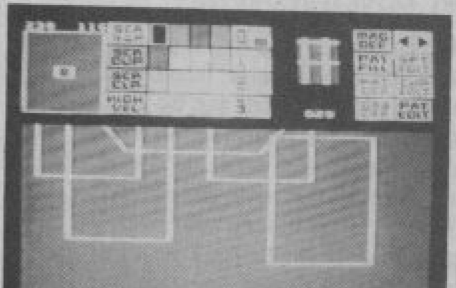
CU TESTED Tried and

Utility Software

Vidcom 64

by
Fred Reid

Tried and Tested is our new regular spot in which our expert reviewers tell you exactly what they think of the latest products. This month, we've rounded up the bargain-basement Vidcom graphics program, The Expert cartridge and the Discom utility disk — all for the 64.



Menu grid appears either at the top or bottom of the screen — or disappears altogether. ▲

I've seen a lot of graphics packages in my time, but *Vidcom 64* sets two new standards in my book. It's not only one of the best drawing program's I've seen on the 64, but also the cheapest!

Vidcom allows the Commodore's VIC chip a full head of steam right from the word 'go'. The only restrictions you will find are those of the VIC chip itself. Your first task is to choose between the better horizontal resolution of 'standard' mode (f3) and the colour choice of 'multi-colour' mode (f1). Whichever your choice, the menu system remains easy to use.

Menu choice

While Vidcom accepts input from the 64's keyboard, using a joystick or trackball as well will make life a whole lot easier. After selecting one of the two colour modes you will see the menu grid and part of one of two drawing screens.

As you'd expect, selecting a particular function is done simply by positioning the arrow-shaped cursor over the relevant box and pressing fire. To confirm your choice, the box will either start to flash or stop flashing, and you will hear a rather pleasant two-tone bleep. As the pitch of the bleep is different for each box, I kept finding myself playing tunes rather than drawing!

The system uses three separate cursors, one for use on the menus, and two for the drawing screen. Why so many? It's quite logical really, when you leave the drawing screen, the cursor is frozen just where you left it, until you return. The third cursor is used in the circle and box functions to indicate a second point on the screen. Toggling between menu and drawing screen is done with the CTRL key.

While using the drawing screen, you will still be able to see the menu grid. As you move the drawing cursor towards the portion covered, the entire menu grid flips up to occupy the other half instead. If you don't want to see the menu at all, pressing the CBM key allows you to see the whole drawing area at once.

One of the advantages of seeing the menu grid while drawing is that you can keep an eye on the magnification window and the cursor's X,Y coordinates. The magnification window shows the pixels around the cursor, and will greatly assist you to position the cursor with single-pixel resolution.

Special features

Next to the magnification window are three function boxes for swapping, clearing and duplicating the two hi-res screens, and a fourth box for selecting the speed the cursor moves at. Next to that, you will see a pallette of sixteen colours and the pen state indicators. You can choose any of the colours assign them to any of the pens and then draw with them.

Pen 'O' is always the background colour, and drawing with this pen is useful for erasing.

The remaining sixteen boxes are for choosing the various drawing modes, and the facilities offered here are superb. Apart from the usual freehand, circle and line modes, Vidcom has some pretty nifty area handling facilities. All the box functions are used in a similar way, place the cursor at one corner of the intended box and press the fire button. Move the cursor to the opposite corner and press again to fix the size of the box. At this point you can move the box around the screen before pressing fire again to initiate the box function. The box function lets you draw boxes, colour box areas, erase boxes and duplicating box areas.

Three special functions are also included. The rotate function spins the contents of the selected box through 90 degrees, while the X-reflect and Y-reflect produce mirror images of the boxes' contents. Beware though, some of the results can be rather unexpected.

Definitions mode is reached by pressing f3, and the right-hand portion of the menu is replaced with a new set of functions concerned with patterns, characters and sprites. There are 32 patterns resident in the system, any of which can be edited or replaced with your own definitions.

Patterns can be used to fill enclosed areas of the screen with texture including a variety of 'brick' effects, lines, dots and squares.

Another use for the patterns is as an elaborate, definable 'paintbrush'. This effect is best compared with spraying through a stencil while moving!

Another useful item is the 'grab definition' function. This works by literally snatching a part of the drawing screen and storing it as a pattern, sprite or character definition. In multi-colour mode (selected from the opening page), the patterns are a blaze of colour, despite the reduced horizontal resolution.

Pressing f5 takes you into in/out mode. From this menu, hi-res screens and pattern definitions can be Loaded, Saved and Verified, and disk users can make use of replace and directory facilities. Pressing f7 loads a directory into memory, you can view it from the 'filename' window. F7 also serves to read the disk's error channel, a facility so often missed by more expensive software!

The manual takes the form of a concertina cassette insert similar to that used on many arcade games.

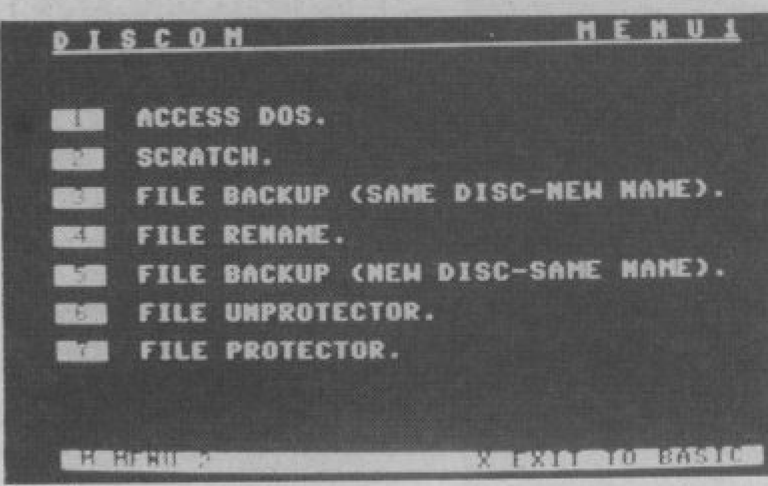
Conclusions

Don't be put off by the £4.99 price tag. This is the business! I would have no hesitation in recommending this package to anyone with a 64 and an artistic streak – indeed Vidcom is already an essential part of my collection.

CRL tell me that a disk version is not planned at the moment, but if the cassette sells well (and I'm sure it will) then it may well appear.

- **Vidcom 64**
  Commodore 64/128
- **CRL Group**
  Tel: 01-533 2918
- **Price: £4.99 (cass)**

tested



▲ **Do you really need Discom to do all this?**

Discom 64/1541

Discom is a small collection of disk utilities for the Commodore 64, that helps keep your disk files neat and tidy. But there's nothing here that you can't accomplish with a simple Basic program, and there's nothing here I haven't seen published in magazines and books, so you can imagine my disappointment.

After a few minutes, Discom presents you with a menu, one of two. Pressing 'M' toggles between menus, or 'X' quits the program leaving you back in Basic. From the first menu, four out of seven options do nothing more than can be done very easily in immediate mode Basic (for example, 'OPEN15,8,15,"SO:FILENAME"' scratches a file). Other than these, there is a disk to disk file copier and a file protector. A file unprotector option will reverse the process leaving the file scratchable again.

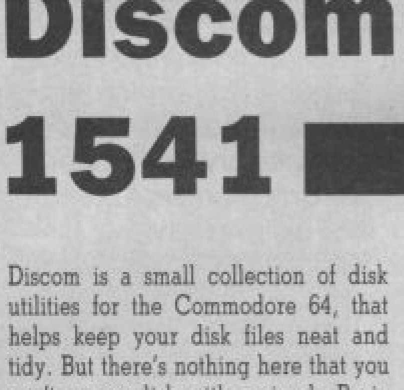
The second menu offers slightly more. A disk backup utility will transfer all the files on one disk to a new disk, providing there is no protection involved. This is a time consuming operation, and you will need to re-load Discom for any further operations. The disk directory option displays the disk name and all the file names, number of blocks and file types but doesn't tell you the number of blocks free! There is an option to make a disk 'read only', an entirely useless function that changes the disk name, and a ridiculous routine that protects a file from being Loaded(?)! The only useful routine here is the unscratch option. This will restore a file name to the directory after it has been scratched, providing the disk has not been Validated.

The manual is very brief and goes some of the way towards explaining how to use the software! My main grouch is that although it explains what each option does, nothing is mentioned about how to use them. Also inexcusable is the lack of warnings. You can destroy months of hard work or hundreds of pounds worth of software in a few seconds if you're not sure what you are doing!

This package certainly gets the thumbs down from me, I would strongly suggest you shop around for a better package or better still, learn to use your disk drive!

- **Discom 64/1541**
- **Commodore 64/128**
- **Initiative Managers Ltd**
  Tel: 06845 60701
- **Price: £14.95 (disk only)**

The Expert cartridge



To my mind, 'The Expert' is the first tape-to-disk system that seems to work with any software. Using the Expert, I found it easy to transfer or back-up all my favourite cassette programs to disk simply, quickly and without needing any specialist technical knowledge.

Although The Expert is cartridge-based, the cartridge contains RAM, not the usual ROM. This means you have to program the cartridge using the disk supplied before you can start a transfer. The advantage here, is that future developments can be incorporated into the system simply by replacing the system disk.

The Expert acts on the program once it is loaded into the computer, rather than trying to read the data on the cassette. This means that Expert will work regardless of the type of fast-loader that the software uses. Once you have loaded the program you wish to transfer, Expert begins to compact it, placing all the parts of the program together. The file is then Saved to disk.

Before beginning a transfer, you will need to prepare a disk. After formatting, simply Load the file called "BOOT" from the Expert disk, and Save it. When run, this file produces a menu of transferred files on that disk and fast-loads the one of your choice. Most transferred files will load (the cartridge is not needed now) in thirty seconds or less, a good deal faster than most cassette turbo systems! For example: it took me about 10 minutes to transfer *Uridium* to disk, and it loaded back in a mere 27 seconds! Depending on the lengths, you will probably be able to fit four or five games onto one disk, with near instant access to any of them.

Obviously the Expert has it's drawbacks. Any program that needs constant access to cassette during execution (like *Koronis Rift*) won't work, and I've had some trouble with games like *Elite* that allow you to load and save high-scores or player data. Trilogic make no promises of total compatibility, but do intend to produce upgraded software to cope with problems like these. On the whole, your average game can easily be transferred to disk without hassle.

Monitor and Assembler

The Expert is not just a tape-to-disk/disk-to-disk utility, but also a very powerful disk-oriented machine code monitor and assembler. All the usual features are present including disassembly, loading, saving and memory dumps, plus some rather useful extras.

The save function allows you to specify a relocate address so that the data loads back into a different area of memory, a disk directory can be viewed at any time and the disk error channel can be read.

The assembler is the usual 'on-line' type, but very useful for 'those little routines'. Perhaps the most useful feature of the monitor is the fact that it occupies no memory. It can freely access all 64K of RAM, or the default RAM+ROM map, making it very easy to save the contents of the normally 'hidden' RAM under the ROM.

The manual completes the picture, documenting the transfer procedure and use of the monitor, as well as giving some practical tips for the more technically minded among us. The manual is well written, and divided into sections with an index for ease of use.

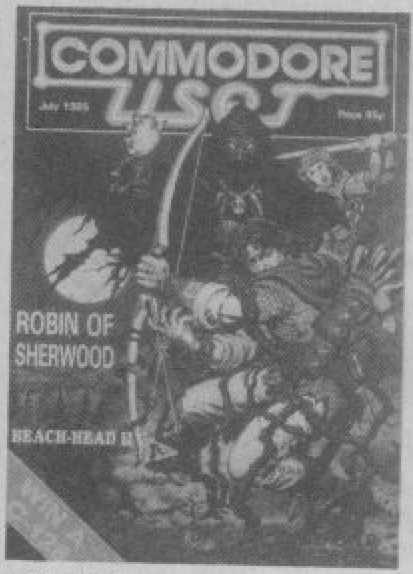
At just under £30, The Expert would seem to be good value considering the quality of the machine code monitor, although think how many new cassette games you could buy for the same price! Having said that, The Expert performs a lot better than other tape-to-disk systems around, so it's worth checking it out. □

- **The Expert cartridge**
- **Commodore 64/128**
- **Trilogic**
  Tel: 0274 684 289
- **Price: £28.95 (cart. and disk)**

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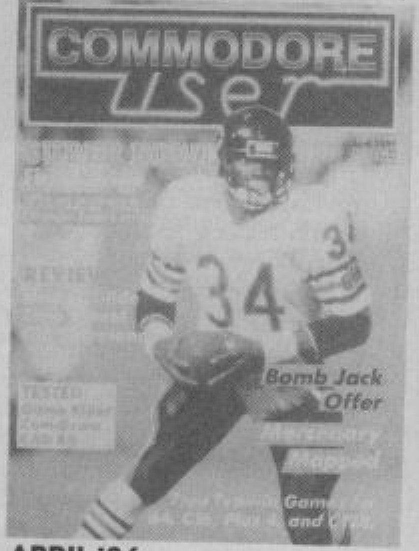
Signed________



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U.S. HOTLINE

Commodore's reprieve

Dan Gutman reports

The hi-tech graveyard is full of computer companies that shot to fame only to be buried in financial ruin. Commodore International has been tottering on the brink of disaster for some time — or so the pundits say. So could the end be nigh for Commodore? And how could its demise affect you!

Let me ask you all a question — *what would happen if Commodore went bust?*

That's a shocker, huh! You usually don't see these types of things in Commodore magazines, do you? Magazines that are devoted to one computer or one company usually do nothing but sing their praises. The bad news gets swept under the rug.

Well not here, pal. A few months back, Commodore came closer to bankruptcy than they would like any of us to believe. I know people at the company who were ready to start emptying their desks.

I don't want Commodore to go under. You don't want Commodore to go under. *Commodore User* doesn't want Commodore to go under. Commodore obviously doesn't want to go under. But the possibility exists.

Just what could happen if Commodore went out of business? It's likely that software for all Commodore machines would slow to a trickle, both in your country and mine. It would be more and more difficult to find parts, peripherals, and get our computers repaired when they inevitably break down.

You'd see fewer and fewer ads for Commodore products, and the magazines that pay their bills with that advertising revenue could start to disappear. The magazine you hold in your hands could very well disappear. That lot is no joke — it's happened before.

Relax. It can't happen to Commodore. At least not until March 15, 1987.

I'm going to be throwing a lot of numbers at you here. If you doze off, just slap yourself awake. You should know what's going on with the company that makes your computer. I'll try not to get too heavy.

Facts and figures

Just three years ago, you'll recall, Commodore was the king of the hill. The 64 was a sort of "Volkswagon of computers" and the company earned a massive $144 million in 1984. In the US, they rolled over everyone in the business. Texas Instruments, Mattel, Coleco, and Sinclair had to pull out.

Since then, it's just been a lot of bad news. The Vic-20 got old and died a death. The 64 was overwhelmed by jazzier and more powerful machines. The Plus/4 and the Commodore 16 were complete failures (at least they were in the States). And the Amiga didn't exactly blow the world away.

In the quarter that ended on December 1st, Commodore lost $53.2 million compared with a $30.9 million dollar profit from the year before. Sales were down 14%. Inventory levels reached $449 million after Christmas in 1985. People simply stopped buying low cost computers in America, and that's all that Commodore was selling at the time.

Since the end of 1984, Commodore has lost $206 million. Two hundred and six million! Pounds or dollars, that's not exactly chicken feed. The company wouldn't have been able to survive it if they hadn't been so successful a few years ago.

So they started cutting costs. An assembly operation in Cork, Ireland and a semiconductor plant in Costa Mesa, California were shut down, with Commodore losing $22 million in the process. And the total work force has dropped from 7,000 to about 3,500 in just one year.

Ugly Rumours

Naturally, the rumours started flying — Commodore was going to go out of business. Or, if they were going to stay in business, Commodore was going to have to be acquired by a bigger company to raise cash. Or, Commodore was going to merge with somebody. *Time* magazine ran an article with the title: *Adios, Amiga? Commodore flirts with failure*. The trade journals reported that Commodore was "poised on the edge of disaster."

The whole thing came down in October, when Commodore's existing loan agreements with its creditors came due. For a couple of days, it was iffy. Could Commodore pay its debts? Would the banks continue to loan them money so they could keep operating? Or would they decide to pull the plug and close the doors of the biggest home computer maker completely?

During this period, Commodore was in "technical default" of its loans. I don't know exactly what that means, but I know it doesn't sound good.

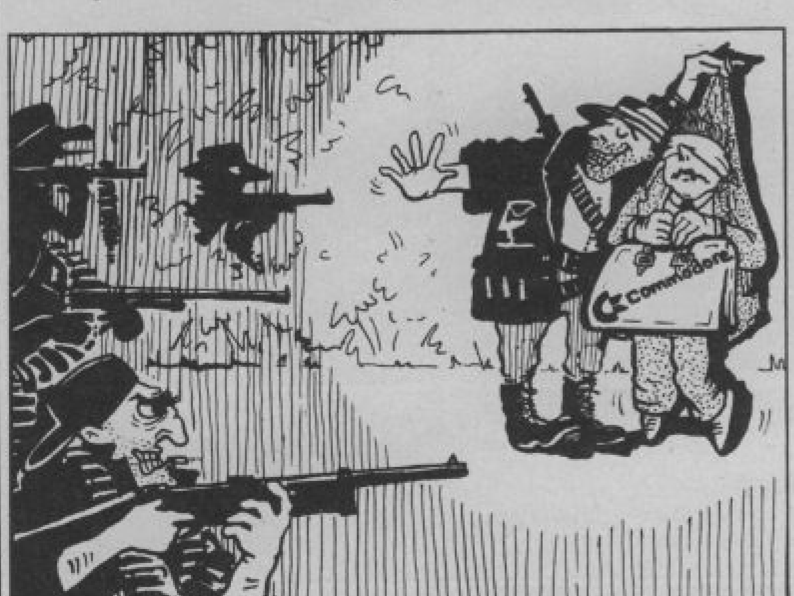
Borrowed Time

Well, things worked out okay, — phew. Commodore reached an agreement with a worldwide consortium of banks for a $135 million loan package. Most industry pundits agreed with the decision, basically saying that Commodore is worth more alive to the banks than it is worth dead. The agreement extends until March 5, 1987. If things don't start looking up by then, the problems will start up again.

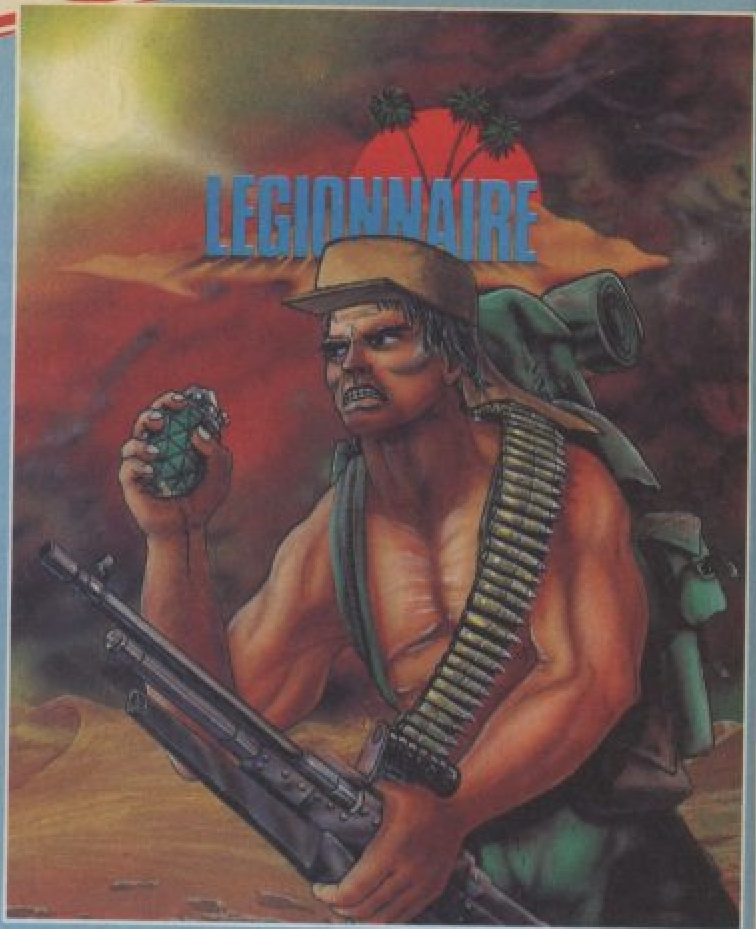
But things are looking better already. The Commodore 64 and the 128 are selling, and Commodore claims to be making money again. Tom Rattigan (formerly with Pepsi) is now the head of the company. Amiga software is finally starting to appear, and in April Commodore slashed the price of the machine in the States by 39% (or $500). That move in particular was long overdue. If they'd chop off a few more dollars, the thing might be affordable to the people who want to buy it. The loan agreement buys time for Commodore — time to get the Amiga rolling.

So don't go shopping for some other computer brand just yet. Commodore has been through the good times and it's been through the bad times. Maybe the next cycle is just around the corner.

Still awake? Catch ya next time!



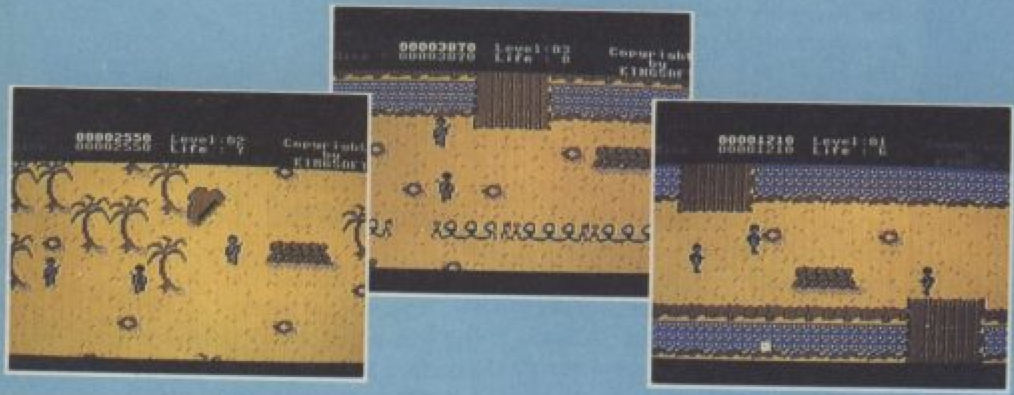
C16/PLUS 4



LEGIONNAIRE

Your mission is to take vital messages to the garrison headquarters. As you travel through the scrolling landscapes, you will be under constant fire from the tribesmen bent on reaching the fort. You will have to use your machine gun with great skill to get past them. There are seven separate areas of scrolling landscapes before the fort can be reached and each area requires increasing skill.

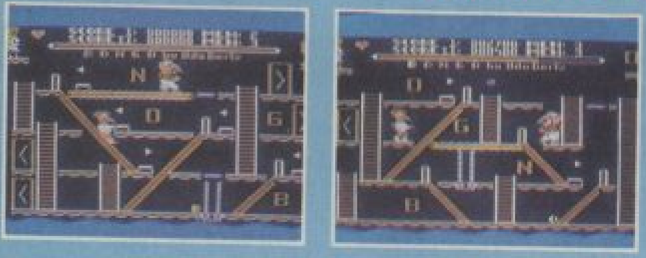
C16/PLUS 4 £5.95



BONGO CONSTRUCTION SET

Bongo Construction Set is a hilarious family game. Bongo is trying to reach the princess, hotly pursued by monsters. He uses ladders, slides, transporters, lifts and trampolines to elude his pursuers but they seem to know his moves before he makes them. There are six stages with five skill levels. You can design your own stages using the joystick and save them on cassette or disk to play later.

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SPACE PILOT

Space Pilot, the legendery hero, is under constant attack by alien ships with one aim - the destruction of his craft. The alien craft attack singly or in battle formation. Equipped with heat seeking missiles, their attack is deadly as well as relentless. Space Pilot with full 360 degrees scrolling and four stages, demanding ever increasing skills retains all aspects of a smash hit on CBM 64.

C16/PLUS 4 £5.95



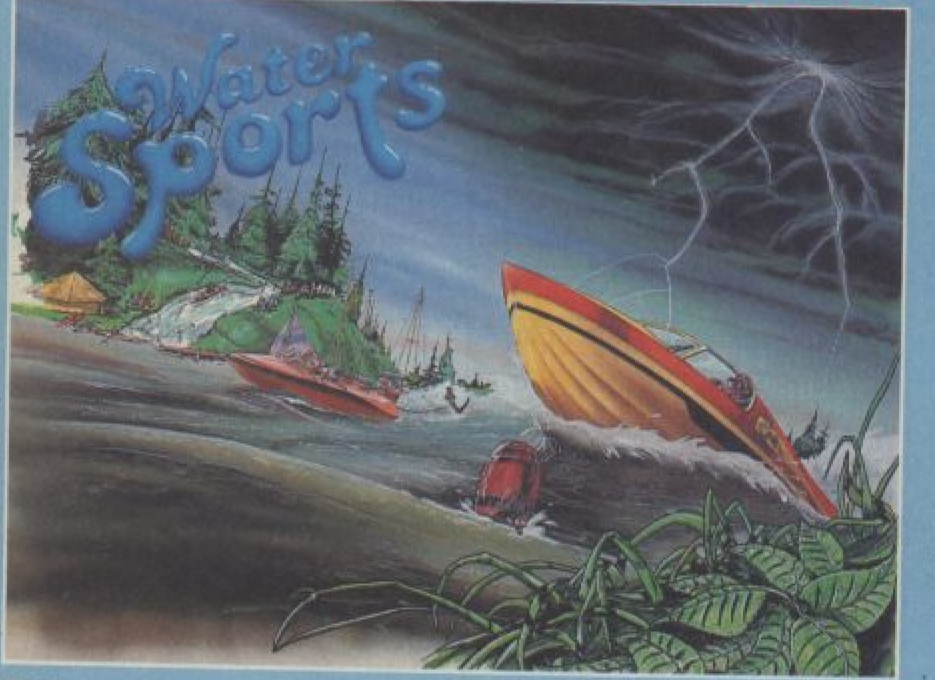
THAI BOXING

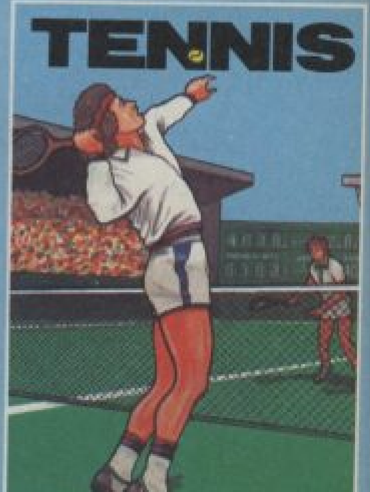
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MUSIC KEYBOARD

● by Malcolm Laurie — For the 64/128

Can't afford to buy the Commodore Music System we reviewed last month? No matter, because we've got a music program for you that's not only free, it's pretty good too.

No complicated instructions; you simply use the keys indicated on the screen layout to change any of the sound parameters. For example, you'd press A to increase attack and Z to decrease it. Apart from the ADSR envelope, you can play around with filters, octaves, pulse rate, voices and a whole lot more to get some really impressive sounds. it's great – try it.

```
0 POKE53265.43
1 POKE53270,24
2 POKE53282.9
3 POKE53283,7
9 POKE53280.8:POKE53281.8:PRINTCHR$(14)
10 DIM ME$(13):DIMX$(15)
11 FORT=0TO13:README$(T):NEXTT:FORT=0TO15:READX$(T):NEXTT
12 DATA"..TRIANGLE","..SAWTOOTH",".....PULSE",".....NOISE","....LOWEST"
13 DATA".......LOW","......HIGH","...HIGHEST","MONOPHONIC","POLYPHONIC"
14 DATA"FILTER.OFF","..LOW.PASS",".BAND.PASS",".HIGH.PASS"
15 DATA"....ZERO",".....ONE",".....TWO","...THREE","....FOUR","....FIVE"
16 DATA".....SIX","...SEVEN","...EIGHT","....NINE",".....TEN","..ELEVEN"
17 DATA"..TWELVE","THIRTEEN","FOURTEEN",".FIFTEEN"
45 FORT=55296TO55575:POKET,0:NEXTT
46 FORT=1024TO1302:POKET.160:NEXTT
50 PRINT"(HOME)(GRY3)┌──────────────────────────────────────┐":
51 PRINT"(OFF)|(WHT)(RVS)  (RGHT)  (RGHT)  |  (RGHT)  (RGHT)  (RGHT)  |  (RGHT)
 (RGHT)  |  (RGHT)  (RGHT)  (OFF)(GRY3)|":
52 PRINT"(OFF)|(WHT)(RVS)  (RGHT)  (RGHT)  |  (RGHT)  (RGHT)  (RGHT)  |  (RGHT)
 (RGHT)  |  (RGHT)  (RGHT)  (OFF)(GRY3)|":
53 PRINT"(OFF)|(WHT)(RVS)  (RGHT)  (RGHT)  |  (RGHT)  (RGHT)  (RGHT)  |  (RGHT)
 (RGHT)  |  (RGHT)  (RGHT)  (OFF)(GRY3)|":
54 PRINT"(OFF)|(WHT)(RVS)  (RGHT)  (RGHT)  |  (RGHT)  (RGHT)  (RGHT)  |  (RGHT)
 (RGHT)  |  (RGHT)  (RGHT)  (OFF)(GRY3)|":
55 PRINT"(OFF)|(WHT)(RVS)  (RGHT)  (RGHT)  |  (RGHT)  (RGHT)  (RGHT)  |  (RGHT)
 (RGHT)  |  (RGHT)  (RGHT)  (OFF)(GRY3)|":
56 PRINT"(OFF)|(WHT)(RVS)  (RGHT)  (RGHT)  |  (RGHT)  (RGHT)  (RGHT)  |  (RGHT)
 (RGHT)  |  (RGHT)  (RGHT)  (OFF)(GRY3)|";
57 PRINT"(OFF)|(WHT)(RVS)  |  |  |  |  |  |  |  |  |  |  |  |  (OFF)(GRY3)|":
58 PRINT"(OFF)|(WHT)(RVS)  |  |  |  |  |  |  |  |  |  |  |  |  (OFF)(GRY3)|":
59 PRINT"(OFF)|(WHT)(RVS)  |  |  |  |  |  |  |  |  |  |  |  |  (OFF)(GRY3)|";
60 PRINT"(OFF)|(WHT)(RVS) Q| W| E| R| T| Y| U| I| O| P| @| *| ↑(OFF)(GRY3)|";
61 PRINT"├──────────────────────────────────────┤":
62 PRINT"|ATTACK......(A+/Z-)..............ZERO|":
63 PRINT"|DECAY.......(S+/X-)..............ZERO|":
64 PRINT"|SUSTAIN.....(D+/C-)..............ZERO|":
65 PRINT"|RELEASE.....(F+/V-)..............ZERO|":
66 PRINT"|RESONANCE...(G+/B-)..............ZERO|":
67 PRINT"|CUTOFF......(H+/N-)..............ZERO|":
68 PRINT"|PULSE.RATE..(J+/M-)..............ZERO|":
69 PRINT"|VOICE..........(F1)..........TRIANGLE|":
70 PRINT"|OCTAVE.........(F3)............LOWEST|":
71 PRINT"|POLY/MONO......(F5)........MONOPHONIC|":
72 PRINT"|FILTER.........(F7)........FILTER.OFF|":
73 PRINT"└──────────────────────────────────────┘":
100 AA$="(HOME)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT
)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(
RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)(DO
WN)(DOWN)(DOWN)":DO$="(DOWN)"
190 S=13*4096+1024:DIMF(26):DIMK(255)
200 FORI=0TO28:POKES+I.0:NEXT
```

EASY ENTER

continued on p.77

LASER GENIUS

AN EDITOR, ASSEMBLER, MONITOR AND ANALYSER THAT REPRESENTS A NEW APPROACH TO MACHINE CODE DEVELOPMENT.

THE EDITOR

Produces tokenised source files which occupy much less space than standard BASIC files and accelerate assembly to 20,000 lines per minute from memory.

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A full two-pass macro assembler (co-resident with the editor) with conditional assembly and cross referencing.

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THE ANALYSER

A completely new concept in program debugging. This unique utility allows you to execute up to ten analyser programs that scrutinise your machine code program while it is running. When a particular condition is found the program will break with an option to trace the path taken.

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ocean iQ

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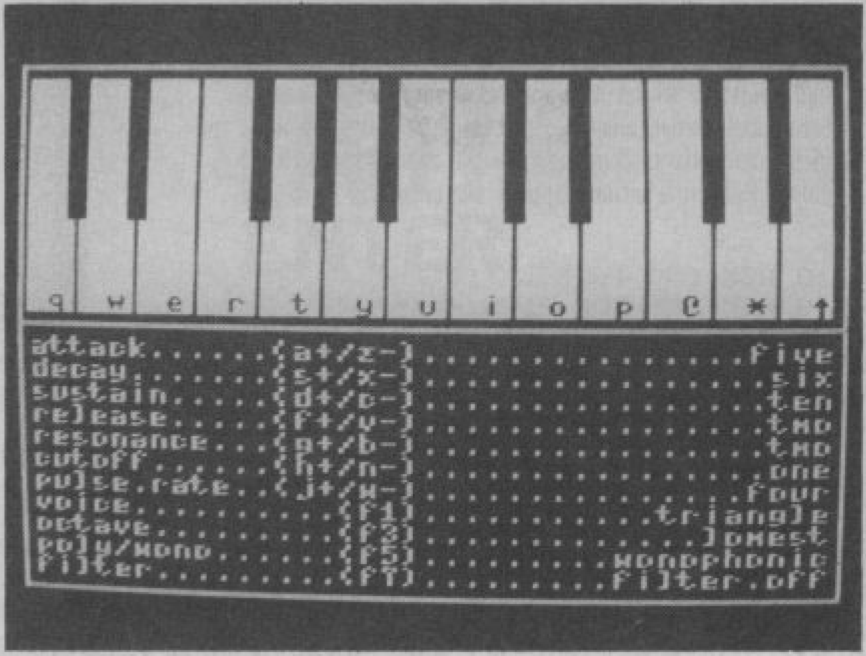
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6 Central Street, Manchester M2 5NS. Telephone: 061-832 6633. Telex: 669977 Oceans G.

```
201 POKE54275,0:POKE54282.0:POKE54289,0
202 POKE54274.15:POKE54281.15:POKE54288.15
210 F1=7040:FORI=1TO26:F(27-I)=F1*5.8+30:F1=F1/2↑(1/12):NEXT
220 K$="Q2W3ER5T6Y7UI9O0P@-*£↑"
230 FORI=1TOLEN(K$):K(ASC(MID$(K$.I)))=I:NEXT
250 WV=16:M=8:HB=256:Z=0:RT=8
260 FORI=0TO2:POKES+5+I*7.AT*16+DE:POKES+6*I*7.SU*16+RE
280 POKES+24.15
281 POKE53265,27
300 GETA$:IFA$=""THEN300
310 FR=F(K(ASC(A$)))/M:T=V*7:CR=S+T+4:IFFR=ZTHEN500
320 POKES+6+T.Z
325 POKES+5+T,Z
340 POKES+T.FR-HB*INT(FR/HB)
350 POKES+1+T.FR/HB
360 POKES+6+T.SV
365 POKES+5+T.AV
370 POKECR.WV+1
380 IFP=1THENV=V+1:IFV=3THENV=0
385 PE=PEEK(197)
386 IFPE<>64THEN385
390 POKES+6+T.SV
392 POKECR.WV:GOTO300
500 IFA$="(F3)"THEN2000
540 IFA$="(F1)"THEN2010
580 IFA$="(F5)"THEN2020
585 IFA$="(F7)"THEN2030
600 IFA$="A"THENIN=16:GOTO2070
601 IFA$="Z"THENIN=-16:GOTO2070
602 IFA$="D"THENIN=16:GOTO2080
603 IFA$="C"THENIN=-16:GOTO2080
604 IFA$="S"THENIN=1:GOTO2090
605 IFA$="X"THENIN=-1:GOTO2090
606 IFA$="F"THENIN=1:GOTO2100
607 IFA$="V"THENIN=-1:GOTO2100
610 IFA$="G"THENIN=16:GOTO2040
611 IFA$="B"THENIN=-16:GOTO2040
617 IFA$="J"THENIN=16:GOTO2050
618 IFA$="M"THENIN=-16:GOTO2050
619 IFA$="H"THENIN=16:GOTO2060
620 IFA$="N"THENIN=-16:GOTO2060
700 GOTO300
1000 X=X+IN:IFX>15*NITHENX=15*NI
1001 IFX<0THENX=0
1002 PRINTAA$::FORT=0TODO:PRINTDO$::NEXTT:PRINT"(RGHT)(RGHT)":X$(X/NI)
1003 AV=A+D:SV=SU+F:RETURN
1100 X=X+IN:XX=XX*XC:IFX=LITHENXX=XL:X=0
1101 PRINTAA$::FORT=0TODO:PRINTDO$::NEXTT:PRINTME$(X+ZX):RETURN
2000 X=OC:XX=M:XL=8:XC=0.5:DO=8:IN=1:LI=4:ZX=4:GOSUB1100:OC=X:M=XX:GOTO300
2010 X=W:XX=WV:XL=16:XC=2:DO=7:IN=1:LI=4:ZX=0:GOSUB1100:W=X:WV=XX:GOTO300
2020 X=P:DO=9:IN=1:LI=2:ZX=8:GOSUB1100:P=X
2021 POKE54276.0:POKE54283.0:POKE54290.0:GOTO300
2030 X=RR:XX=RT:XL=8:XC=2:DO=10:IN=1:LI=4:ZX=10:GOSUB1100:RR=X:RT=XX
2032 IFRT=8THENPOKE54296.15:AD=0
2033 IFRT>8THENPOKE54296.RT+15:AD=7
2034 POKE54295.R+AD:GOTO300
2036 GOTO300
2040 X=R:DO=4:NI=16:GOSUB1000:R=X
2043 POKE54295.R+AD:GOTO300
2050 X=PU:DO=6:NI=16:GOSUB1000:PU=X
2051 PG=INT((PU+15)/35):POKE54275.PG:POKE54282.PG:POKE54289.PG
2052 POKE54274.PU+15:POKE54281.PU+15:POKE54288.PU+15:GOTO300
2060 X=LL:DO=5:NI=16:GOSUB1000:LL=X
2061 POKE54294.LL+15:GOTO300
2068 GOTO300
2070 X=A:DO=0:NI=16:GOSUB1000:A=X:GOTO300
2080 X=SU:DO=2:NI=16:GOSUB1000:SU=X:GOTO300
2090 X=D:DO=1:NI=1:GOSUB1000:D=X:GOTO300
2100 X=F:DO=3:NI=1:GOSUB1000:F=X:GOTO300
```

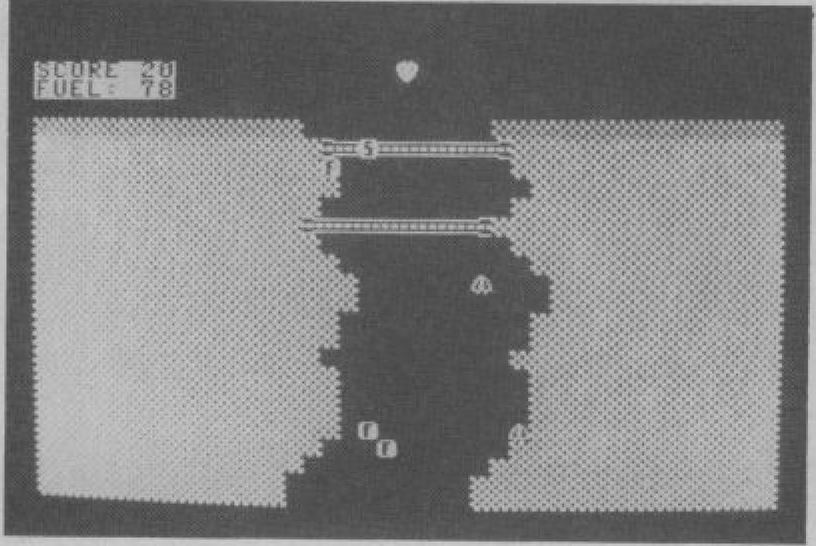
EASY ENTER



TUNNEL

● by P. Walker

For Plus/4 and C16



Written on the Plus/4, Tunnel also works on the 16. You have to steer your spaceship down the tunnel picking up fuel canisters whilst avoiding stationary objects and the occasional guided missile. Professional quality graphics and nice sound effects combine to make a challenging little game. Full instructions appear on screen.

```
10 REM *** TUNNEL ***
20 REM *** FOR PLUS/4 ***
30 REM *** BY P.WALKER 4/4/86 ***
40 COLOR 1.1:COLOR 0.1:COLOR 4.1:PRINT"(CLR)"
50 VOL 7
60 S=DEC("3800")
70 KEY1."POKE65298.PEEK(65298)AND251:POKE65299.(PEEK(65299)AND3)OR"+STR$(S/256)
80 REM *** SET VARIBLES ***
90 POKE 55.0:POKE 56.56:CLR:S=DEC("3800")
100 PRINT"(CLR)MONITOR":PRINT"(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)T D000 D7FF "HEX$(S)
:PRINT"(DOWN)X"
110 PRINT"(DOWN)POKE65298.PEEK(65298)AND251:POKE65299.(PEEK(65299)AND3)OR"S/256
120 PRINT"(DOWN)(DOWN)RUN 140"
130 POKE 1319.19:FOR A=0 TO 4:POKE1320+A.13:NEXT:POKE239.6:END
140 S=DEC("3800")
150 DATA 65.24.60.90.90.153.153.255.36
160 DATA 83,36,255.153.153,90,90,60,24
170 DATA 0.126.195.207.199.207.207.207.126
180 DATA 27,0,255,0.187.187.0,255,0
190 DATA 28.248.7.0.187.187.0.7.248
200 DATA 29,31.224.0.187.187,0.224,31
210 DATA 88.24.24.60.36.102.255.195.195
220 DATA 81.126.195.207.195.243.243.195.126
230 FOR I=1 TO 8:READ A:FOR C=0 TO 7:READ B:POKE S+(8*A)+C.B:NEXT:NEXT
240 HS=100
250 COLOR 1.2:PRINT"(CLR)"
260 GOSUB 880
270 PRINT"(CLR)"
280 G=15:X=20:P$="            ":P=0:L=.5
290 FU=99
300 C=7
310 S=0
320 D=0
330 M=0:MX=0:MY=23
340 O$="▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒"
350 PRINT"(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)(DOW
N)(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)"
360 A=INT(RND(1)*3)
370 IF A=1 AND G<26 THEN G=G+L
380 IF A=2 AND G>8 THEN G=G-L
390 GET A$
```

EASY ENTER

```
400 IF D=1 THEN GOTO 1320
410 IF A$="." THEN X=X+1
420 IF A$="." THEN X=X-1
430 IF FU>99 THEN FU=99
440 CHAR 1,0,24,"":PRINTO$;"(UP)";SPC(G);P$
450 FU=FU-1:PRINT"(HOME)(GRN)(RVS)SCORE":S:
460 IF S<10 THEN PRINT:"(LEFT) "
470 PRINT"(HOME)(DOWN)(RVS)(RED)FUEL:":FU:"(OFF)"
480 COLOR 1,C,4
490 IF FU=0 THEN D=1
500 GOSUB 660
510 OX=PEEK(3072+X)
520 IF OX<27 OR OX>29 THEN POKE (3072+X).83:POKE (2048+X).113
530 IF OX=81 THEN S=S+5:IFM=0THENFORI=1TO7:VOLI:SOUND1.I*100.1:NEXT
540 IF OX=102 OR OX=65 THEN D=1
550 IF OX=88 THEN D=1
560 IFOX=0THENFU=FU+10:IFM=0THENFORI=1TO7:VOLI:SOUND1.800.1:SOUND3.1004.1:NEXT
570 IF P$<>"           " THEN P$="           ":COLOR 1.C.4
580 IF INT(RND(1)*4)+1=3 THEN J=INT(RND(1)*10)+G:POKE3992+J.0:POKE2968+J.53
590 IF INT(RND(1)*10)+1=3 THEN J=INT(RND(1)*10)+G:POKE3992+J.81:POKE2968+J.68
600 IF INT(RND(1)*10)+1=3 THEN J=INT(RND(1)*10)+G:POKE3992+J.65:POKE2968+J.50
610 IF INT(RND(1)*6)+1=5 THEN P$="(BLU)£[[[[[[[[]"
620 P=P+1:IF P/100=INT(P/100) THEN C=INT(RND(1)*14)+2:COLOR 1.C.4
630 S=S+1
640 L=0.5*INT(S/200)+1
650 GOTO 360
660 REM *** MISSILE ***
670 IF M=0 AND INT(RND(1)*20)=5 THEN GOSUB 840
680 IF M=0 THEN GOTO 830
690 MY=MY-1
700 IF MY=-1 THEN  M=0:GOTO 830
710 T=INT(P/100)+3
720 IF T>8 THEN T=8
730 IF T<3 THEN T=3
740 IF INT(RND(1)*10)>T THEN GOTO 830
750 POKE 3072+MX+(MY*40).OM
760 POKE 2048+MX+(MY*40).CM
770 F=0
780 IF MX>X THEN MX=MX-1:F=1
790 IF MX<X THEN MX=MX+1:F=1
800 IF F=1 THEN OM=PEEK(3072+MX+(MY*40)):CM=PEEK(2048+MX+(MY*40))
810 POKE 3072+MX+(MY*40).88
820 POKE 2048+MX+(MY*40).99
830 RETURN
840 M=1:MX=G+5:MY=23
850 VV=MX+((MY-1)*40):OM=PEEK(3072+VV):CM=PEEK(2048+VV)
860 SOUND 3.1023.400
870 RETURN
880 PRINT"(CLR)"
890 CHAR 1.16.8."(RVS)(RED)TUNNEL(OFF)"
900 CHAR 1.14.10."(RVS)(PUR)BY P.WALKER(OFF)"
910 CHAR 1.7.12."(GRN)DO YOU WANT INSTRUCTIONS?"
920 GET A$
930 IF A$="Y" THEN GOTO 960
940 IF A$="N" THEN GOTO 1310
950 GOTO 920
960 PRINT"(CLR)(RED)YOU ARE A SMALL SPACECRAFT: (WHT)♥"
970 PRINT"(DOWN)(CYN)(SHOWN AT THE TOP OF THE SCREEN)"
980 PRINT"(DOWN)(ORNG)TRAVELLING DOWN A LONG TUNNEL."
990 PRINT"(DOWN)(PUR)  YOU MUST DODGE VARIOUS OBSTACLES."
1000 PRINT"(DOWN)(GRN)AND COLLECT FUEL CANISTERS."
1010 PRINT"(DOWN)(BLU)IF YOU RUN OUT OF FUEL.HIT AN OBSTACLE"
1020 PRINT"(DOWN)(YEL)OR HIT THE SIDES OF THE TUNNEL YOU DIE."
1030 PRINT"(DOWN)(ORNG)YOUR FUEL IS SHOWN AT THE TOP LEFT"
1040 PRINT"(DOWN)(BRN)OF THE SCREEN.IT CAN GO NO HIGHER THAN"
1050 PRINT"(DOWN)(LRED)99.FUEL CANISTERS ((GRN)@(LRED)) ARE COLLECTED"
1060 PRINT"(DOWN)(GRY1)BY RUNNING OVER THEM."
1070 PRINT"(DOWN)($130)(RED)PRESS THE SPACE BAR TO CONTINUE($132)"
1080 GET A$:IF A$<>" " THEN GOTO 1080
1090 PRINT"(CLR)                    (RVS)(GRN)OBSTACLES:(OFF)"
1100 PRINT" (RED)♣(WHT).....(ORNG)OTHER SPACESHIPS-DO NOT HIT!"
1110 PRINT"(DOWN) (GRN)@(WHT).....(BRN)FUEL CANISTERS-COLLECT THEM!"
1120 PRINT"(DOWN) (PUR)●(WHT).....(BRN)BONUSES-COLLECT FOR POINTS!"
1130 PRINT"(DOWN) (BLU)£[[]...(LRED)BRIDGES-YOU WILL PASS UNDER "
```

EASY ENTER

continued on p.80

```
1140 PRINT"(DOWN)  (LRED)THEM AUTOMATICALLY.WHILE UNDER BRIDGES"
1150 PRINT"(DOWN)  (LRED)YOU CANNOT SEE YOUR CRAFT."
1160 PRINT"(DOWN)  (CYN)↑.....(GRY2)GUIDED MISSILES.THESE WILL    "
1170 PRINT"(DOWN)  (GRY2)FLY TOWARDS YOU.THEY TURN QUITE SLOWLY"
1180 PRINT"(DOWN)  (GRY2)SO ARE QUITE EASY TO DODGE."
1190 PRINT"(DOWN)  (GRY2) WHEN THEY APPEAR THEY MAKE A SOUND"
1200 PRINT"(DOWN)  (GRY2)(PRESS 'A' TO HEAR THE SOUND)"
1210 PRINT" (DOWN)($130)(RED)PRESS RETURN TO CONTINUE...($132)"
1220 GET A$:IF A$=CHR$(13) THEN GOTO 1250
1230 IF A$="A" THEN SOUND 3,1023,10
1240 GOTO 1220
1250 PRINT"(CLR)":SPC(17):"(RVS)(CYN)KEYS:"
1260 PRINT"(DOWN)(DOWN)(DOWN)       (RED)'.'(WHT)........(GRN)MOVE CRAFT RIGHT"
1270 PRINT"(DOWN)(DOWN)(DOWN)       (RED)','(WHT)........(GRN)MOVE CRAFT LEFT"
1280 PRINT"(DOWN)(DOWN)(DOWN)         (RED)($130)PRESS SPACE BAR TO START($132)"
1290 GET A$
1300 IF A$<>" " THEN GOTO 1290
1310 RETURN
1320 REM *** DIE ***
1330 FOR I=8 TO 0 STEP -1:SOUND 3,I*100,5:NEXT
1340 PRINT"(CLR)              (RVS)($130)(RED)YOU DIED!!!"
1350 PRINT"(DOWN)(DOWN)(DOWN)"
1360 IF OX=102 THEN PRINT"          (GRN)BY HITTING THE WALL"
1370 IF OX=88 THEN PRINT"       (CYN)BY BEING HIT BY A MISSILE"
1380 IF OX=65 THEN PRINT"      (PUR)BY BEING HIT BY A SPACECRAFT"
1390 IF FU=0 THEN PRINT"       (BLU)BY RUNNING OUT OF FUEL."
1400 PRINT"(DOWN)(DOWN)          (WHT)YOUR SCORE WAS:(LEFT)";S
1410 IF S>HS THEN PRINT"(LRED)      (DOWN)WHICH BEATS THE HIGH SCORE!!":HS=S
1420 PRINT"(DOWN)(DOWN)         (ORNG)HIGH SCORE:";HS
1430 PRINT"(DOWN)(DOWN)      (RED)($130)DO YOU WANT ANOTHER GO?"
1440 GET A$
1450 IF A$="Y" THEN GOTO 270
1460 IF A$="N" THEN PRINT"(CLR)":END
1470 GOTO 1440
```

EASY ENTER

Our New Easy Enter system makes program entering even simpler. It works like this:

Control codes appear in plain English (always inside brackets). Just look them up in the list below. For example: (DOWN) means 'press the cursor down key'. We've included the graphic itself in the table so that you can check you've got it right.

Actual graphic characters are not changed and appear as they do on screen — you'll find them all printed on your keyboard.

Control Codes

Code	Action
(UP)	press cursor up key
(DOWN)	press cursor down key
(LEFT)	press cursor left key
(RGHT)	press cursor right key
(HOME)	press HOME key
(CLR)	press SHIFT/HOME
(INST)	press SHIFT/DELETE
(RVS)	reverse on
(OFF)	reverse off
(F1)etc	press function key indicated
($130)	flash on (16 and Plus/4)
($132)	flash off (16 and Plus/4)

Colour Codes

Code	Action
(BLK)	press CTRL and 1
(WHT)	press CTRL and 2
(RED)	press CTRL and 3
(CYN)	press CTRL and 4
(PUR)	press CTRL and 5
(GRN)	press CTRL and 6
(BLU)	press CTRL and 7
(YEL)	press CTRL and 8
(ORNG)	press CBM and 1
(BRN)	press CBM and 2
(LRED)	press CBM and 3
(GRY1)	press CBM and 4
(GRY2)	press CBM and 5
(LGRN)	press CBM and 6
(LBLU)	press CBM and 7
(GRY3)	press CBM and 8

Note: secondary colours on the 16 and Plus/4 are slightly different to the above.

COMMODORE TITLES

COMMODORE 64 SOFTWARE

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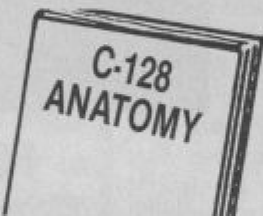
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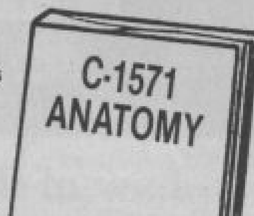
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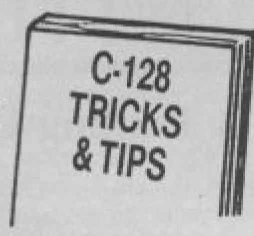
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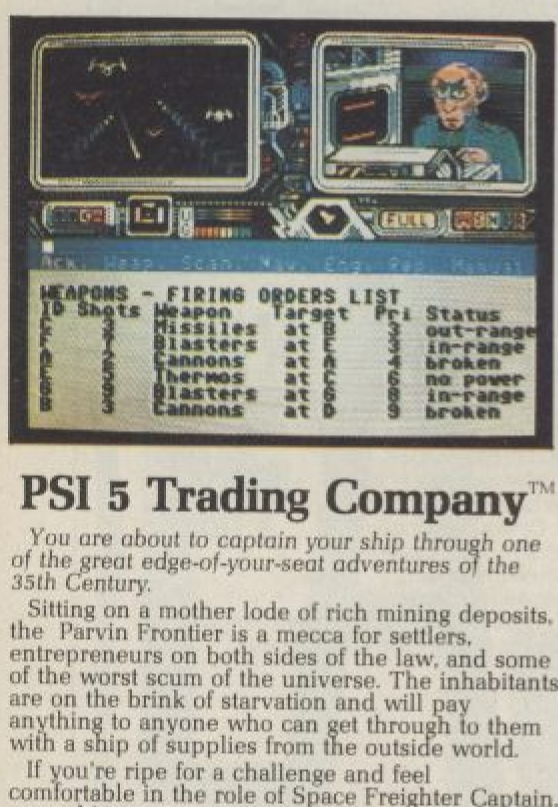
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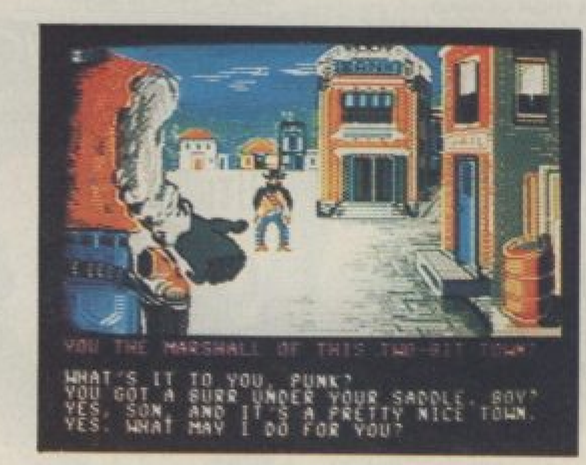
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by Geof Wheelwright

While IBM users were busy marvelling over the achievements of a little piece of US software known as Lotus 1-2-3, UK Commodore 64 owners have for the past couple of years had access to an equally impressive spreadsheet-based integrated software offering from Viza software known simply as VizaStar. To help experienced users get to grips with all the features in this impressive package, we asked Viza's technical support manager John Dunn to supply us with the questions he is most often asked about how to best use VizaStar along with his answers.

? In cases where both sorting and numeric equations form part of the work needed doing on a file, how do I determine whether to use the spreadsheet or database facilities?

In general, use the database where you wish to store large volumes of information in a standard format, such as names and address files. Use the worksheet to do calculations where you want to see the effect quickly (i.e. in budgetting your income). It's usually easier to use formulae referring to the current record than to data-transfer to sheet — as this allows you to use the same worksheet for calculation.

? Do you have any general advice on how I can enter my worksheet information more effectively?

Use the F1 key to enter cell references into a formula. Use F2 to enter an absolute cell reference into a cell. NOTE: Ordinary cell references are adjusted when sheet data is copied to reflect their new position relative to the original cell or range: absolute cell references are not adjusted when the sheet COPY command is given.

? What about cell formatting? How do I format a group of cells — as opposed to setting the format for the whole sheet?

To set the format of a range of cells, use the sheet format to set a single cell, then copy the cell into the required range.

? I find that memory can get tight on a larger spreadsheet. How can I ensure that I don't squander memory?

To conserve worksheet memory use a wider cell width to space out your sheet, instead of leaving empty columns. Try to work mostly either along rows or down columns — not in both directions at once.

? My printer manual says there are a number of special effects I can achieve by using 'Escape codes' from my applications. What's the best way of getting at these in VizaStar?

You can turn on special printer modes by typing the ESC codes used by your printer into a cell in the worksheet called the SETUP call. Type a single quote as the first character followed by the list of codes as decimal numbers (e.g. 27 for ESC, etc.) with a space between each value. Change the setup cell in the print options menu to show the reference of the cell in the worksheet where you have typed the printer codes. The codes in the SETUP cell will be sent to the printer before any worksheet or database information. You may send a secondary address to the printer by typing a lower case letter as the first entry in a set-up cell. Use 'A' for 1, 'B' for 2, etc.

? What's the best way of controlling the internal paper line counts. Why do I have problems using my printer when doing this?

To allow flexibility, VizaStar does not reset the internal paper line count after each time the print command is issued. This allows you to print several rows or ranges from different areas of the worksheet and the paper will be automatically spaced up to the start of the next page (and the footer and header cells printed out if present) when the number of 'lines in page' (see 'print options' section in the manual for more details) has been reached. Issue top command if paper has been re-aligned before printing.

? The above suggestions are all fine if you're using the spreadsheet a lot, but how about those of us who want to use the database a lot more effectively. What can you suggest?

First of all, you might think about giving the 'DATA USE DATABASE' or 'DATA USE FILE' command to create a new database or load an old one. VizaStar will automatically place you in the data setup menu to design the file layout. Use the 'paint' command to draw field start and end markers quickly and then press F1 to enter a formula. Having entered it, press 'save' and then 'quit'. You can then use this data setup again to change existing layouts.



? What's the best way to recover from disk errors on a database?

Disk errors can happen on even the most expensive systems. If you have a problem with a database file export, then 'import' it to a new database on a different disk. To selectively access such a file, go into the spreadsheet and type your 'match criteria' for the particular information you want.

? Can we have a more detailed run-down on the printer support?

Certainly. VizaStar supports all Centronic parallel printers via its own easy to use cable (available from Viza at £20.70) along with RS-232 printers another cable Viza will also provide for the same price. You can do high-resolution screen dumps on Epson and Commodore printers. Although multi-bar and pie graphs can be outputted to Epson and Commodore dot-matrix printers, the CBM 1526/MPS 802 printers can't handle them as they don't have true high-resolution graphics. □

Cheap‘n’

Business software used to cost an arm and a leg. Now the Americans are selling it in supermarkets – and the trend is spreading to the U.K. We test out the latest arrivals: Cut & Paste a budget wordprocessor for the 64, and the Load ‘n’ Go series of cut-price personal productivity software.

Cut & Paste Wordprocessor

There are already quite enough word-processors around for the 64. So Electronic Arts, makers of *Cut and Paste,* are taking a different tack to get you to part with your money. The program is being hyped as a ‘remarkably easy’ to use package for first timers — “you can learn to use it in several minutes” chortles the blurb and goes on to claim it to be “the first sensible word-processor for the home”.

Hence the title, the idea is that you can move text around simply by ‘cutting’ it and ‘pasting it’ elsewhere — just like wallpaper.

The problem is that the package costs £24.95 and is available only on disk (from Ariolasoft). So you'll need a disk drive and a reasonable display (not a telly) to make it all worthwhile.

Anyway, if you were to buy a copy you would receive two disks (one for the program, the other for data storage) and a 28 page manual, much of which is totally irrelevant to your particular computer. The data disk contains several example files, which demonstrate trivialities such as how to present a letter.

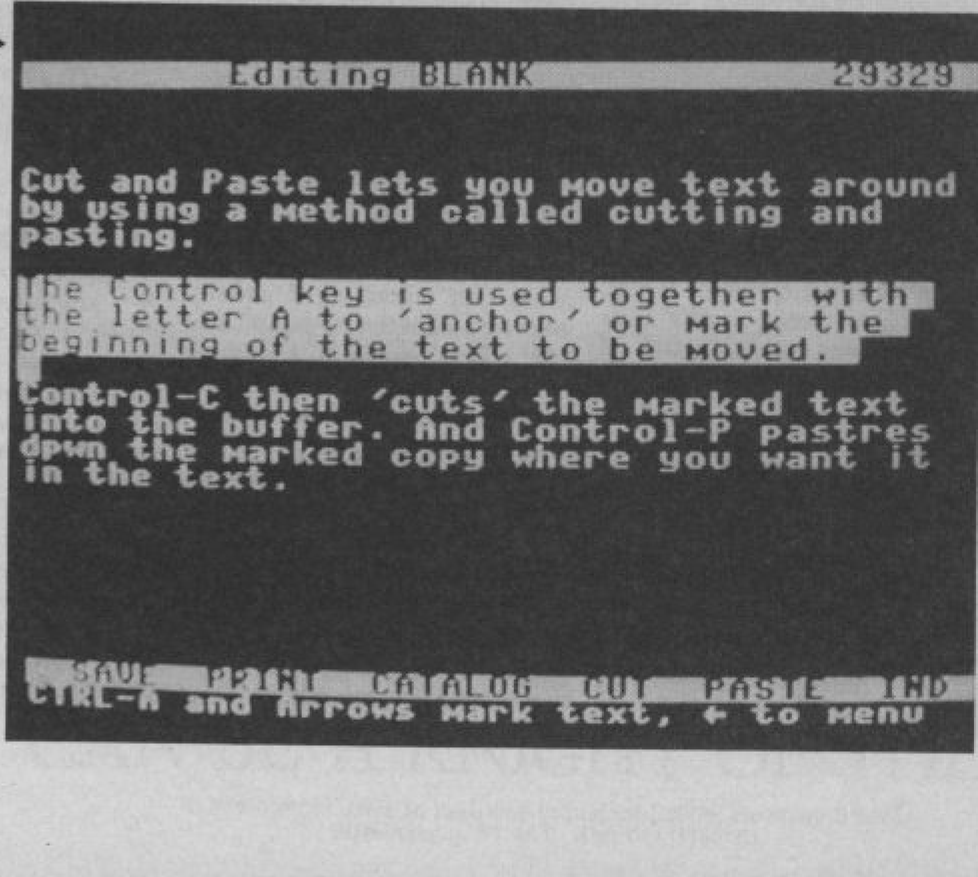
Cut & Paste uses an assortment of different commands stored in a menu at the bottom of the screen. This is accessed by pressing the ‘Escape’ or ‘Backspace’ key, depending upon your micro. The cursor keys then move the highlight from one command to another along the command line, before a command is executed by pressing ‘Return’.

Editing text is simple — words or sentences can be highlighted by pressing ‘Ctrl A’ to fix the cursor, and extending it using the cursor keys. This text is then cut and relocated anywhere using the insert option key. Text can be copied from one document to another and saved to disk before you print it out on a variety of printers.

There also appears to be a ‘bug’ in the program which means that if you highlight something to ‘cut’ it into the buffer and you hit the ‘insert’ key by mistake, your text will go off to never-never land.

All-in-all this program rather falls between two stools. It's not cheap enough to write off as a ‘learning experience’ and have fun with in the meantime — nor is it good enough to justify the price (or investment in hardware) as a serious wordprocessor.

- Cut & Paste
- **Ariolasoft**
  68 Long Acre
  Covent Garden
  London WC2E 9JH
  01-836 3411
- **Price: £24.95 disk only**



Cut and Paste lets you highlight text to be deleted or moved around in the document. Menu options appear at the bottom of the screen.

Load‘n’Go Software

Meanwhile, another US software house, *Load ‘n’ Go,* has decided on a ‘series’ approach for its disk only software. This plastic-wrapped collection of small business packages range from a cheque-book manager to a word-processor to an address book. These are unambitious packages at an unambitious price, £7.95, and they're distributed in the UK by Argus Software.

‘Load ‘n’ Go software gives nothing away (except a disk). There's no manual, so it's up to you to work out how each of the programs is supposed to work.

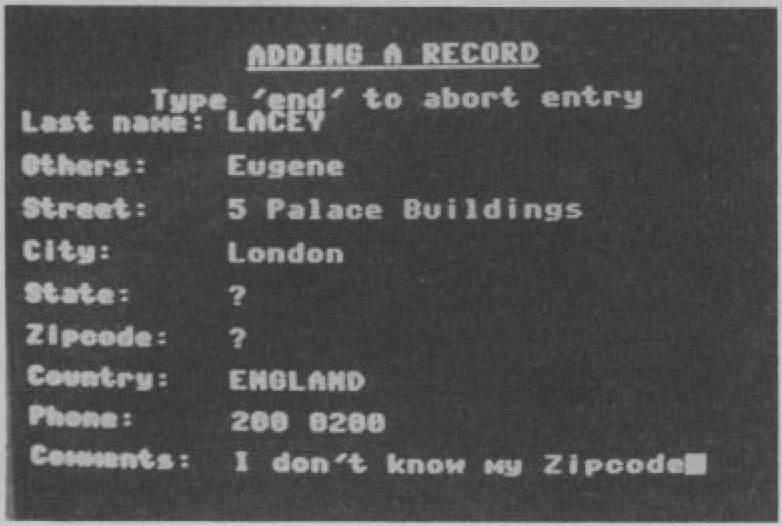
● **Home Finance Organiser:** The single disk comes wrapped in a piece of paper and stapled into a plastic wallet, ready to hang with thousands of others on someone's shop wall. Once loaded the program itesIf is just as simple, but efficiently presented. A choice is given between three sections — Address Keeper, Checkbook Balancer and The Budgeter.

Problems start the moment you select the *Address Keeper* option. Being an Americanized package you can find answers to the Street and City, but I don't know my State (but after looking at this it was verging on insane) and my Zip Code. The program has a nasty habit of losing entries if you don't save them immediately, but it will sort them and search for the first few letters of any word.

Checkbook Balancer simply keeps four pieces of information about any transactions — the month, day, amount

simple

by
Geof
Wheelwright



Pro Finance Organiser: not quite right for British addresses.

and any remarks. This information is the same for deposits, withdrawals, written check, and bills. Each entry is given a number, so you can view each individually or all at once (in chronological order). Naturally the balance of your account is calculated automatically, and you can print out the details. But you cannot view, for example just the deposits or just the bills.

Finally the *Budgeter* is an electronic shopping list for keeping records of the items you have bought and how much they cost. The program is brilliant enough to add these values up and will print them out for you as well. Magic stuff!

● **Pro Finance Organiser:** Again, this has three programs. The first is another check book balancer to keep details of written checks. The 'Pro' in the title must refer to its superiority over the aforementioned program of the same name. In addition to the date, amount and details of checks, you can enter the check number and a budget category (car expenses etc.).

Mail List Manager is a utility for printing address labels. Stupidly it is not compatible with Address Keeper, so you have to type out all the addresses you want to print again. The final program is an electronic calendar for any given month and year after 1752 — essential for those of you planning your holidays in the year 2000.

● **Electronic Scheduler:** On the same theme is the next program — Electronic Scheduler, which lets you keep track of important appointments and special dates. It will store, search and sort details by name, date, time, person, location, subject and comments, and then print out the details.

● **Home and Business Card File:** The fourth program is a Home and Business Card File — businesses I assume refering to car-boot sales and the like. It will store records of all your business contacts, including names, titles, business types and their addresses, telephone numbers and peculiarities! Simplicity is the key-note as usual, but you can add, amend and search through the records just like the programs described earlier.

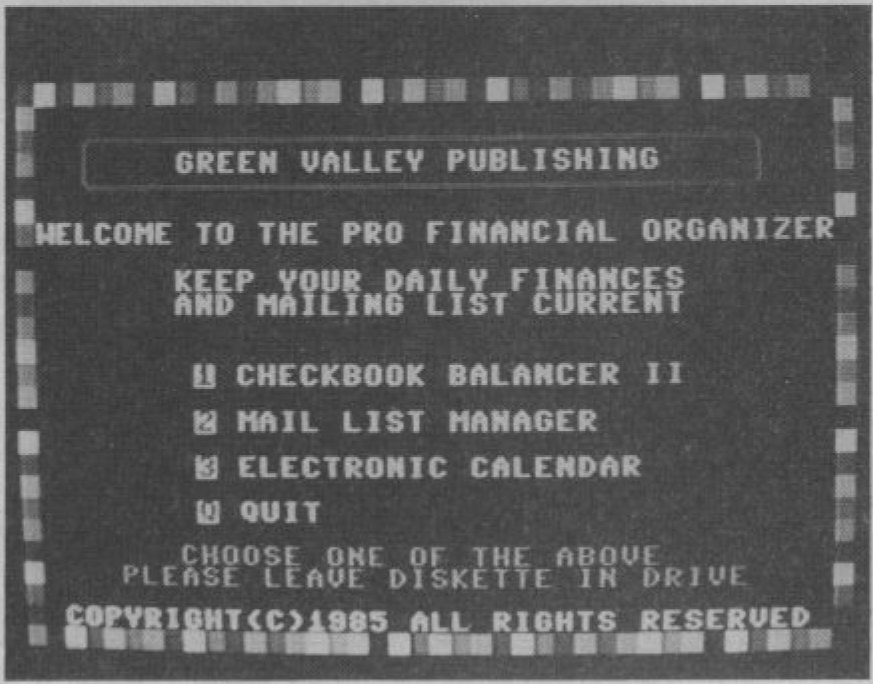
● **G'Base:** The final member of the Home Management Series we tested is *G'Base* — yet another member of the series acting as a database, but it differs slightly in that you can define the records yourself. Once this is done, the same facilities available in the other programs apply.

The Address Keeper, Mail List Manager and Home & Business Card File are essentially the same programs — but each has different fields for its database. The trick if you need a database is to choose the package which best suits the details you want to keep a record of, or create your own records using G'Base unless you can afford a package which lets you choose the records.

Several of the programs perform tasks that are not really suited to computers anyway — even the most complex calendar programs are not as useful as the diary in your pocket, and to simplify these programs to such a degree makes them virtually useless.

Some of the programs are written in Basic, are inclined to crash and do not represent good value for money considering their limited features. There are other packages on the market which offer more features at a slightly higher price, but if you want to keep it really simple (for teaching perhaps) and you think you can find a use for these somewhat elementary programs, then by all means take a closer look.

Also available in the series are a wordprocessor, a personal spreadsheet and a Family Tree program.



Pro Financer Organiser contains three separate programs which must be loaded separately.

- Load 'n' Go Series
- Argus Software
  Liberty House
  222 Regent Street
  London W1
  01-439 0666
- Price: £7.95 (disk only)

Computer • MAGIC

Yes, we're back again for one more instalment of magical tricks and tips for the Commodore 64. We couldn't resist it, since you've been so busy sending us the magic gems you've discovered.

Upside down

```
10 PRINT CHR$(147)
20 FOR P=0 TO 63 : POKE 1024+P,P
30 POKE 55296+P,14 : NEXT P
40 POKE 53272,29
50 POKE 56334, PEEK (56334) AND 254
60 POKE 1, PEEK(1) AND 251
70 FOR P=0 TO 511 STEP 8
80 FOR Q=0 TO 7
90 A(Q)=PEEK(53248+P+Q) : NEXT Q
100 FOR Q=0 TO 7
110 POKE 12288+P+Q,A(7-Q) : NEXT Q
120 NEXT P
130 POKE 1, PEEK(1) OR 4
140 POKE 56334, PEEK(56334) OR 1
150 FOR Q=0 TO 7 : READ X
160 POKE 12288+160*8+Q, X : NEXT Q
170 PRINT : PRINT : PRINT : PRINT
180 PRINT " UP-SIDE-DOWN" : PRINT
190 DATA 255,255,195,195
200 DATA 195,195,255,255
```

Upside Down Program

Here's a very useful program for people who like standing on their heads. Yes, this program turns all the letters in the standard character set upside down and redesigns the cursor.

How does it work? Well, it prints the first 64 characters in the character set and designs a new character set by turning all these characters upside down. Following this, the cursor character is redesigned and displayed.

Iain Andrews (age 13)
Ayrshire

More or less

As you probably all know, the numeric expressions on the 64 consist of variable names and values separated by the arithmetic operators (+,−,*,/). Something that is less well known, however, is that arithmetic expressions can also contain any of the comparison (=<>,<,>,<=,>=) or logical (AND, OR, NOT) operators as well.

The following program gives a fairly comprehensive example of the use of such a hybrid expression, whilst at the same time providing a simple one line solution to problems like this.

Take as input, a date entered as day number, month number and year. All you have to do is to determine whether or not the date entered is valid. For example 30,2,1978 is not a valid date because FEB never contains 30 days.

Line 20 below does all the work, I leave you to sort out its operation.

```
10 INPUT "DATE (DD, MM, YYYY)"; D,M,Y
20 F=(D>0)*(M>0)*(M<13)*(D<(32-(M
   +M<8) AND 1)+(M=2)*(2+
   ((Y AND 3) = 0))))
30 IF F=0 THEN PRINT "IN";
40 PRINT "VALID DATE"
50 PRINT : PRINT : GOTO 10
```

More or Less Program

Think of a number

There are many times, especially when dealing with machine code routines, when it would be useful to be able to convert decimal numbers to Hex and back or to binary and back, or even octal.

The following program is designed just for such tasks. In fact the program can convert numbers between any two number bases in the range 2 to 36.

Rod Taylor, Bucks.

```
810 PRINT : INPUT "BASE IN";BI
820 INPUT "BASE OUT";BO
830 INPUT "NUMBER";NU$
840 D=0 : FOR C=1 TO LEN(NU$)
850 A=ASC(MID$(NU$,C,1))-48
855 IF A>9 THEN A=A-7
860 IF A>=BI THEN 945
870 D=D*BI+A : NEXT C
880 PRINT "ANSWER= ";
890 B=INT(LOG(D)/LOG(BO)+1
900 FOR C=B TO 1 STEP -1
910 N=INT(D/BO↑(C-1))-INT(D/BO↑C)*BO
    +48
920 IF N>57 THEN N=N+7
930 PRINT CHR$(N);
940 NEXT C : PRINT : GOTO 950
945 PRINT "NUMBER BASE ERROR"
950 INPUT "MORE (Y/N) OR
(R)ESTART";NU$
955 IF NU$="R" THEN 810
960 IF NU$="N" THEN END
970 IF NU$<>"Y" THEN 950
980 PRINT : PRINT "BASE IN";BI
990 PRINT "BASE OUT";BO : GOTO 830
```

Number Converter Program

On the border

You've all seen the flashing borders you get when turbo tapes are loading. Well the program below doesn't merely produce this professional effect, it lets you carry on programming whilst it runs. In fact, you can do just about anything whilst it's running.

Since the machine-code routine is interrupt driven you can't use it when interrupts are needed (loading, saving etc). When you've typed it in, RUN it and the routine will install itself at location 49152. To activate it, just type POKE 788,0: POKE 789,192. Here's the routine:

Andrew Tarski, Dursley, Glos.

Border listing

```
10 FOR C=49152 TO 49167: READ A:
POKE C,A: NEXT C
100 DATA 165,15,142,32,208,202,208,2
110 DATA 162,15,142,1,192,76,49,234
```

Store your routines

Over the past few months we have seen quite a lot of short machine code routines to perform several very useful functions. Unfortunately, the best place to put machine code routines on the 64 starts at location 49152 — and nearly everyone puts them there.

Many of these routines contain references to absolute memory addresses within the code itself. This makes a routine difficult to move to another location in memory so that it's not possible to have all your favourite routines in memory together.

This program is an attempt to let you locate machine-code routines at any RAM address you like, so that you *can* put all your favourites together without them overlapping.

To use the program you need to know the first and last location addresses of the block of code you wish to move, and the start address that the block of code is to be moved to. Once you have this information, you RUN the program and answer the relevant questions as they come up.

You should make sure that the numbers you enter do not mean that the old and new blocks of code overlap because there is no check made for this.

S. Stanhope, Grimsby.

```
10 INPUT "CURRENT START ADDRESS:";S
20 INPUT "CURRENT END ADDRESS:";E
30 INPUT "NEW START ADDRES:";N
40 D=N-S : FOR C=S TO E
50 POKE C+D,PEEK(C) : NEXT C
60 FOR C=S TO E : B=PEEK(C)
70 F=(B AND 12)=12 OR (B AND 25)=25
80 IF NOT F THEN 130
90 V=PEEK(C+1)+256*PEEK(C+2)
100 IF U<S OR V>E THEN 130
110 V=V+D : POKE C+D+2,INT(V/256)
120 POKE C+D+1,V-INT(V/256)*256
130 NEXT C
```

Routine organiser program.

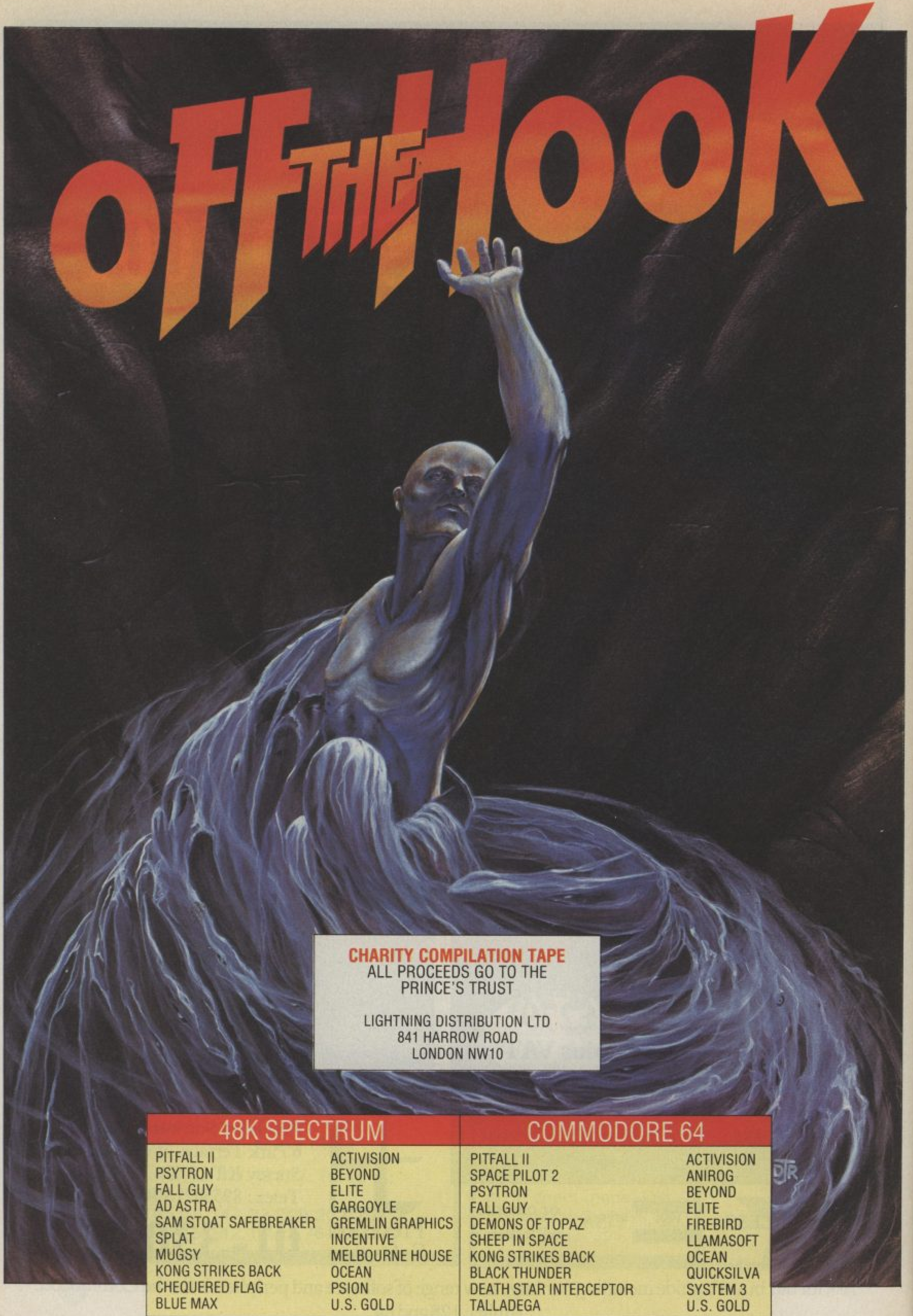
One-poke draw

Probably one of the shortest pieces of magic yet, it uses just one POKE (yes, *one*), to provide you with a dinky little drawing program. And here it is:

POKE 788,80

When you've typed it in, in direct mode, just use the cursor keys to draw. Better still, you can change colour easily by using the CTRL and the CBM key with numbers 1-8.

John Palmer, Devon.



OFF THE HOOK
CHARITY COMPILATION TAPE
ALL PROCEEDS GO TO THE
PRINCE'S TRUST
LIGHTNING DISTRIBUTION LTD
841 HARROW ROAD
LONDON NW10
48K SPECTRUM
PITFALL II ACTIVISION
PSYTRON BEYOND
FALL GUY ELITE
AD ASTRA GARGOYLE
SAM STOAT SAFEBREAKER GREMLIN GRAPHICS
SPLAT INCENTIVE
MUGSY MELBOURNE HOUSE
KONG STRIKES BACK OCEAN
CHEQUERED FLAG PSION
BLUE MAX U.S. GOLD
COMMODORE 64
PITFALL II ACTIVISION
SPACE PILOT 2 ANIROG
PSYTRON BEYOND
FALL GUY ELITE
DEMONS OF TOPAZ FIREBIRD
SHEEP IN SPACE LLAMASOFT
KONG STRIKES BACK OCEAN
BLACK THUNDER QUICKSILVA
DEATH STAR INTERCEPTOR SYSTEM 3
TALLADEGA U.S. GOLD

NEXT MONTH

July will be HOT!

If you thought your sizzling new look June issue was hot just wait till you get your hands on July. Just look at what we've lined up so far.

PLAY TO WIN — *launched*. The super free gift of hints and tips on the front cover of this issue becomes a regular feature starting in June. We've mapped the 'V' Mothership, worked out how to use the Communiputer, and have deciphered all the Lizard-speak codes and symbols. There are also peaks and pokes for Mr Puniverse and a map too secret to mention here.

THE INSULT CONSTRUCTION SET If you're tired of Golf, fed up with Pinball, and jaded with the Adventure Construction Set then perhaps you would like to try our exclusive type-in Insult Construction Set for C64/128 owners.

BUZZ has news of the latest coin-op conversions, a report from the Commodore show, and measures the response to the Amiga launch.

PARDON ME, 64. Part two of our programming feature on how to make your 64/128 do two things at the same time.

GAMES The avalanche of new games continues. The G Force are getting off to a red hot Summer as they check out *Ghosts and Goblins*, *Green Beret* (Please Dave, please), *Nexus*, *Jet Set Willy* on the C16 and all the latest simulations including *Acro Jet* and *Knights of the Desert*.

THE GAMES MAN We talk to the Godfather of the games business about Simple Minds, his Ferrari, favourite games, likes and dislikes, playing music on his 64, and much more. Who is this mystery man? Have one pound in your pocket and give it to the newsagent on the 26th of June and all will be revealed.

Uncle Jim's Commodore Club

Uncle Jim is full of bright ideas. He's always on the lookout for ways to use his beloved Commodore computer around the home. This month, he's had a particularly good idea . . .

Last Thursday my nephew and niece, young Trevor and Denise were coming to tea, so I thought I'd give them a bit of a surprise by rigging up a computerised doorbell — using my Commodore of course. The idea was that it should check the identity of callers and, play a personalised tune if it recognised them.

So if it was Ronnie the postman it would play "Hey, Mr. Postman", and for the window cleaner, "When I'm Cleaning Windows". But if my mother-in-law pressed the button, it would be programmed to play nothing at all, in the hope that she would eventually go away.

I spent some time scratching my head over how to construct it. Then, after clearing up the fallen dandruff, I sketched out a rough plan.

The general principle of the doorbell was simplicity itself. When the button was pressed, it would turn on a video camera trained on the front doorstep. The picture of the caller's face would be transmitted to a digitiser, and the processed image compared with a database of regular callers' faces stored on my 64's disk.

If a match was found, the appropriate tune would be played by loading and running a BASIC program. The sound from the Commodore would then be relayed via a microphone through an old record player amplifier to a loudspeaker above the front door.

All this looked extremely promising on paper, but how could I get it set up by tea time? The answer, I decided, was to forget the TV camera, digitiser, computer and microphone for the time being, and implement a temporary semi-manual system.

This would involve disconnecting the door bell, then watching from an upstairs window to see when anybody called. As soon as somebody pressed the button, I would go and put a suitable record on the radiogram.

So I took up position on the toilet so that I could squint out of the bathroom window and watch for Denise and Trevor. To make sure they would be impressed I had stuck a notice under the bell push: "WARNING! FULLY COMPUTERISED DOORBELL SYSTEM, DEFINITELY NOT SEMI-MANUAL".

At about half past four, I saw the vicar arrive on the doorstep. Drat. Seeing the notice, he put his glasses on, read it, put them away again and range the bell. Of course, nothing happened because it was disconnected. What could I do? I had to convince him that the bell worked, or my reputation as the village computer buff would go down the drain. Then again, I wanted him to go away before the children turned up.

As usual, I had a brilliant idea. Pinching my nose to make my voice sound like computer-synthesised speech, I called through the window, "He's out!"

The vicar immediately looked up, and I dived down out of sight. "What?" he queried.

"I said, he's out. Please try later." There was a pause, and I hoped he had got the message and gone away.

"Well, when shall I come back?" came his voice. In my irritation, I forgot to pinch my nose.

"Oh, leave it till tomorrow, can't you?" I bellowed in a strange monotone. "I'm out until then."

"Right-ho, Jim," he said cheerily. I watched him go down the path, and in the nick of time too because Trevor and Denise appeared about thirty seconds later. However, as Trevor was about to ring the bell,



Denise grabbed his arm.

"Don't touch that," I heard her say. "Look at the notice — it's one of Uncle's stupid computer systems."

"Okay," said Trevor, and he knocked on the door instead. I didn't quite know what to do, so I thought I might as well go for broke and put the record on anyway. I raced downstairs and, turning the volume on the radiogram right up, put "Tea For Two" on the turntable and lowered the arm. Suddenly, there was an appalling noise — like a house falling down. Looking around me, everything was still standing, but I was taking no chances. I dashed out of the front door shouting, "Run for your lives!"

Trevor and Denise were completely unperturbed by this, because they were listening to Motorhead on a dual-headset Walkman.

Instead they wandered indoors and, as I cautiously followed, it became apparent that the noise was coming from the radiogram. Of course! I had removed the stylus so that I could take it to the hi-fi shop to get a replacement, and the arm had been ploughing a massive furrow across my copy of "Tea For Two"!

Well, since this little setback, the development of the Uncle Jim Commodore Doorbell Attachment (UJCDA) hasn't been going well. So I've started on the automatically opening letter-box that detects and shreds final demands — mustn't forget to tell Postman Ron. □

TOMMY'S TIPS

Portable problem

I have a Commodore SX-64 and have to travel 40 miles to get software on disk but if I had a data recorder and wanted software on cassette I would only have to travel 200 yards.

Is there any way I can connect a data recorder to my SX-64?
Nik Jeffries, Wales.

The only conversion I have seen to allow a data recorder to be used with the SX-64 involved making changes to the PCB and adding wedges to the ROM; not a job for the faint hearted. Commodore even went to the trouble of removing the code which recognises Device 1 (the data recording device number). I am afraid you are going to either have to resort to mail order for your disks or persuade your local dealer to order them for you.

On the border

Being a radio amateur computers play a very important role in my station. My next project is Amateur high definition television. It is popular nowadays to generate test cards on computers, my problem is getting a test card to fill the full screen! We have two computers in the household, a C16 and C64, generating test cards on the 16 is easier with the DRAW, BOX, CIRCLE commands etc., but is there any way of getting into the border areas on either of these machines? There is nothing worse than showing a test card that just fills the centre.
Dave Shirley, Hastings.

I regret that there is no way you can actually draw into the border area since it does not occupy any part of the screen memory. The only changes you will see in this area are the 'stripes' during some turbo loaders which is done by changing the border colour rapidly using faster interrupts.

Unlike machines like the BBC, none of the Commodore displays occupy every inch of the screen; an advantage when some TVs 'lose' either the top or bottom line of your display. About the only thing you can do is to make the border the same colour as the background, but no drawing I'm afraid.

Basic Alternative

I have just started to learn machine-code on my Plus/4, and my problem is how do I get information from the keyboard into my program with machine code?

At present I use Basic (Get A$) and then transfer to my machine-code program to read byte 512 ($0200) and proceed from there, but this is proving slow. Is there a book which can supply a memory map and/or a guide to the routines in the Plus/4?
D. Stainton, Cleveland.

Commodore did produce a rather expensive (£9) photo-copied 'reference manual' for the 16 and Plus/4, although they may have stopped doing it now. The standard routines are the same for both machines so any memory map of the 16 will be relevant for the Plus/4 as well. Having said that, there still isn't a great variety, about the only useful ones I know of being the *C16 ROM Disassembly* and *Using the C16*, both by Peter Gerrard and both listing the main memory map addresses. Perhaps if enough people continue to buy the C16 we might see a Raeto West book, but don't hold your breath.

To give you a start however, you might find the following addresses of use:

- Current Key Pressed (LSTX) — 203B
  SCNKEY Routine — 65439
  (KERNAL Jump table address)
- All vectors from 768-779 are same as CBM 64
- All vectors from 788-817 are same as CBM 64 vectors from 790-819.

Number cruncher

I'm learning to program the Plus/4 and I've met one snag. In checking that one number divides completely into another in a series, one uses (X – INT (X)) = 0. but it doesn't, it comes out as .0000000001 or –.000000007. By the way, that's easily got over by (X – INT (X)) <.001. Does the Commodore 64 or 128 also do this?

Also can you summarize simply the difference between the Plus/4 and the 64. A lot of BASIC works quite happily on both.
E.J. Thornthwaite, Norfolk.

This problem is a common one and is due to the way in which computers store numbers. Whole numbers (integers) can be stored quite happily up to plus or minus 32768. However, when you store floating point numbers the storage is split between the part representing the number and the part representing the 'size' of the number (where the decimal point will go). As a result, you can store a much larger range of numbers, but with a decrease in the effective accuracy.

Using **INT (X)** will always round to the nearest whole number to give a true integer value, but the floating point equivalent will still be held as the nearest approximation so you cannot use a test for equality.

All microcomputers suffer from this

problem, but there is a simple way round it. Instead of **IF (X–INT (X)) = 0**, use **IF INT (X/Y *Y = X**, then if **X** is exactly divisible by **Y** the test is true, otherwise it fails. This works because you actually end up testing 2 floating point values instead of an integer with a floating.

The Plus/4 uses Basic 3.5 which contains a lot more commands for graphics and sound etc than the BASIC 2.0 used by the 64. Likewise the 64 has sprites and a much better sound chip which requires lots of POKES and PEEKS to use properly, but which don't exist at all on the Plus/4. The memory of both machines are also quite different. Programs that will run on both machines must use only BASIC 2.0 commands with no POKES or PEEKS.

Fast and slow

● **Recently, I have noticed, that when I type in the command FAST on my C128, the screen goes blank, as it should in 40-column mode, but when I type SLOW, sometimes I don't see the picture come back. Is there any reason for this? Help much appreciated!**
D. Allen, W. Midlands.

SLOW and **FAST** only change the clock speed of the processor, the reason the 40-column screen is turned off is that the VIC chip that controls the 40-column screen can't run at the faster rate to keep the screen refreshed. Are you quite sure you typed SLOW correctly? I assume that you were typing blind since you would not be able to see the screen after typing **FAST**; it is very easy to make a mistake in this way and if you did the computer would register a *syntax error,* but not actually do anything.

Also, it is perfectly possible to clear the screen and change the background and text colours when in FAST Mode. If these were both changed to the border colour then typing SLOW would *appear* to have no effect even though the screen was in fact back on. If you are sure you haven't done any of these things then you may have a fault on your machine and should get it checked out by your supplier.

Plus/4 print

● **I have had a Plus/4 for over a year, and am doing my 'O' level project on it. For them I need a printed sample run. I have tried practically everything, but can not seem to print while running. Is there any way that I could keep the printer open? I have an MPS 803.**
Simon Craghill, Worthing.

You don't say whether you are using machine-code or Basic, but I'll assume the latter. What you must do is to **OPEN** a channel for the printer e.g. **100 OPEN 4,4,7** which will give you both upper and lower case letters, and then use **PRINT#4** to output to the printer. The following examples will print a string and array values respectively:

```
200 PRINT#A, "THIS IS A
    TEST OF THE
    PRINTER"
300 FOR A=0 TO 9
310 FOR B=1 TO 5
320 PRINT#4, DUM/B
    +(A*5));
330 NEXT B:PRINT#4
340 NEXT A
```

In the latter case it will print 10 rows of 5 columns of figures from an array DUM (DIM DUM (50)). When you have finished all the printer output then close the channel with **CLOSE 4**.

Three for the 128

● **I've got three questions for you on my new C128. My first problem concerns sprites. When you've made a sprite and saved it with the SSHAPE command, you've then got your sprite in a string. But how can I get the sprite into data statements. Secondly, how do I move the screen one column to the right?**

And lastly, if I've got a screenful of text on the screen, how can I make menu options appear in windows without interfering with the text on the screen?
Tord Mattsson, Sweden.

The simplest way of printing the values for use in DATA statements is to dump the values in the Sprite Registers directly to the printer. The short program at the end will dump out the values of the 8 sprites stored in the user registers; if you want more than 8 then you can just transfer the next lot of sprites in after the first 8 have been dumped. The list can then be typed in after the main listing with suitable line numbers added.

To move the screen one full column to the right, type the following: **POKE53270,PEEK(53270)OR7**. To set it back, type **POKE53270,PEEK(53270)AND 248**. (Bits 0-2 comprise the x-scroll register, while bits 0-2 of 53265 control the y-scroll). These bits can be altered in machine-code in single steps to give a smooth scroll if required.

To restore an area of the screen you must first save it before creating the window. You need only save as large a portion of the screen as you wish to overwrite and this must be done in machine-code to be fast enough. After you have created your window and added the text inside it you can recreate the original screen and remove the text in the window simultaneously, by copying back the original text to the screen memory then restoring the window to full size.

Don't forget to reserve sufficient space for the largest window area, probably the best place above Basic (to save bank switching) unless there isn't enough room.

```
10 OPEN 4,4
20 FOR SR=0 TO 7: PRINT#4,
   "DATA ";: LT=5
30 FOR LP=0 TO 62
40 V=PEEK(3584+(64*SR) +
   LP):L=LEN (STR$(V))
50 PRINT#4, RIGHT$
   (STR$(V), L-1); :LT=LT+1
60 IF LT>75 THEN PRINT#4:
   LT=5: IF LP<62 THEN
   PRINT#4, "DATA ";
70 IF LT> AND LP<62 THEN
   PRINT#4, CHR$(44);
80 NEXT LP: PRINT#4
90 NEXT SR: PRINT#4:
   CLOSE4
```

Key Beep

● **Now that I've got my really professional-looking C128, I'd like to make it behave like an expensive computer. Some of these have an option to make the keys beep when you press them. I can't seem to make this happen on my 128 using Basic. Can you help?**

You can't really achieve this using Basic, I'm afraid. In fact, you'll need to use interrupts and change the IRQ vector. But let's not get too technical, here's the machine-code program you require, in the form of a Basic loader.

It produces a high pitched beep when any key is pressed, except the CBM, Control and Restore keys. You get a lower beep when you press Return or Enter.

```
10 REM KEY SOUND
20 FOR I = 5120 TO 5195
30 READ A
40 S=S+A
50 POKE I,A
60 NEXT I
70 IF S <> 8932 THEN
   BEGIN
80 PRINT "?ERROR (SPACE)
   IN (SPACE) DATA"
90 END
100 BEND
110 SYS 5120
120 DATA 169, 255, 141, 6,
    212, 141, 24, 212
130 DATA 169, 9, 141, 5, 212,
    120, 169, 26
140 DATA 141, 20, 3, 169, 20,
    141, 21, 3
150 DATA 88, 96, 72, 165,
    213, 201, 88, 240
160 DATA 34, 201, 76, 208,
    12, 169, 103, 141
170 DATA 0, 212, 169, 17,
    141, 1, 212, 208
180 DATA 20, 201, 1, 240,
    240, 169, 103, 141
190 DATA 1, 212, 169, 33,
    141, 0, 212, 169
200 DATA 17, 208, 2, 169, 0,
    141, 4, 212
210 DATA 104, 76, 101, 250
```

Take a tip from us, Tommy's Tips are the best. When it comes to answering your technical and programming queries, whether they're on the 64, 128, 16 or Plus/4, Tommy's your man. Go on, write to him: Tommy's Tips, Commodore User, 30-32 Farringdon Lane, London EC1R 3AU.

TOMMY'S TIPS

CLASSIFIED

AD INDEX

Hot Shots

By Mike Pattenden



This is the end result of a mammoth three hour photo session. Brilliant isn't it? Apparently these people are responsible for Melbourne House's *Redhawk* game. The woman P.C. in the picture used to be a real policewoman. Now there's an interesting fact for you.

Right, stop talking and pay attention at the back there, it's time once again for the column that shook the world, the one they're so ashamed of that it has to go at the back. Put your hands together for Hotshots yaay! And let's plunge straight into the hard news element of this month's column — we're going over to Mike Pattenden in Tripoli . . . .

● Thank you, Alistair, and as the shells rain down here I've important news. I've been predicting someone would go right over the top with a game and now they have. And who



else should do it but crazed Republican, *Wild Bill Steeley*. First he brought out *Conflict in Vietnam* in an attempt to let all those survivalists win the war they lost, and now he's gone one better. He's updated a section of *F-15 Strike Eagle* that allows you to fly a Libyan Mission, by putting in Tripoli with **Qaddafi's** command centre included. There's no mention if the French Embassy and the various civilian sites the Americans hit are included, but I doubt if they're in there. When Wild Bill tried to run an ad for it in the **New York Times** the paper rejected it because it was in poor taste. Nevertheless sales are increasing. Nice one Bill . . . .

● Meanwhile over in this country the effects of the raid are being felt in software houses. **System 3** were forced to evacuate their offices in Hatton Garden after a bomb scare. Shortly after this industry organ **CTW** carried a story about a member of **Activision** who refused to go to Heathrow because there was going to be a bomb — so a junior had to be sent instead. Some of this was indeed true. However, the person who refused to go was none other than editor Greg Ingham. Cries and Whispers of Lies and Whoppers, guys?

● Staying with the column's up-to-the-minute topicality Mastertronic are feeling slightly red-faced at the unfortunate title of their current MAD hit *Countdown to Meltdown*. A representative said that they had no plans to recall the tapes though. If Wild Bill had written it he'd probably call the game back to rename it *Chernobyl Disaster*!

● Fancy a bit of dirt and innuendo? Try this one, then. **Mary Whitehouse**, guardian of all that is decent in this life, and an avid EastEnders fan, missed her billed appearance on **Micronet's Chatline**. A Micronet staff member phoned up to find out what was wrong only to be told she was in bed with her husband. She was in fact ill . . . .

● Sticking with Micronet for a while longer. The communication's network is desperately trying to line up sexy **Sam Fox**, the nation's favourite gal, for an on-screen appearance. Sort of live Strip Poker. . . .

● No doubt industry megamouth **Bruce Everiss** will be shocked to hear this. He's running a moral crusade against the BT owned company's **Gayline** facility. Rumour has it that the knives at BT are out to get him . . . .

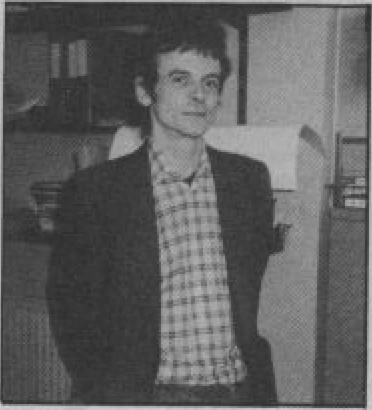
● Now for a jolly nice story. **Clive Brown**, Ariolasoft's Technical Assistant has given up his job and taken to the bottle. He's going in to bar management down in Bournemouth. The pub he's working for is none other than '**The Commodore**' Blimey, wot a coincidence it's a small world innit etc, etc . . . .

● My thanks to the PPLO (Pet Person Liquidation Organization) for making me an honorary member. Sorry I can't print your correspondence comrades, it was a bit long. Besides it would make the Lielow Kindergarten cry . . . .

● If you were under the impression *Streethawk* had not seen the light of day you would be wrong. The game has — in a manner of speaking. **Ocean** signed up a mail order deal with a catalogue company for the game at Christmas last year. It duly appeared to all who ordered, although it turned out to be a platform game. Who says the game's late?

● If you're wondering where the keenly awaited C16 title **Winter Events** is, it's been held up after U.S. Gold forced changes on Anirog because of it's similarity to *Ward's Winter Games*. A startled Mr. Gupta, boss of Anirog denied this, but when pressed, said: "I don't think that's any of your business." But it is Mr Gupta, it is.

● I can see more trouble brewing between *Elite* and *Alligata*. The latter company seem determined to wind thrifty Steve Wilcox up. They've



Gibbo goes straight. On the left you see the original wild headbanging look as modelled by programmer Tony Gibson last year. And now on the right you see the after. After what? Well after financial consideration, really. Tony, who co-wrote *Seaside Special* and *Ghettoblaster*, decided he needed a change of image for business purposes. (*Are you reading Jeff!*) Tony and partner Mark Harrison have a new biggie on the way.

released *Bombo* an arcade game which bears a stunning resemblance to Elite's *Bombjack*. Elite are currently seeking legal advice. If you remember Elite stopped Alligata putting out the original *Who Dares Wins*. That case is still waiting for Elite to file damages for the loss they made. If they don't do this by September the case gets dropped — at which point Alligata will probably make a counter claim. Sorry to bore you there, but I do like to keep you informed . . . .

● This has been Mike Pattenden for Hotshots in Tripoli until next month.



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